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FINAL ENVIRONMENTAL IMPACT STATEMENT/
ENVIRONMENTAL IMPACT REPORT

State Clearinghouse No. 95052023

Eagle Mountain Landfill and Recycling Center Project

Volume I
Final EIS/EIR

County of Riverside Planning Department

and

United States Department of the Interior
Bureau of Land Management

Prepared by:
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FINAL
ENVIRONMENTAL IMPACT STATEMENT
ENVIRONMENTAL IMPACT REPORT
FOR THE
EAGLE MOUNTAIN LANDFILL AND
RECYCLING CENTER PROJECT
Environmental Impact Report No. 397
State Clearinghouse No. 95052023

January 1997

Applicant

MINE RECLAMATION CORPORATION
and
KAISER EAGLE MOUNTAIN, INC.

Prepared for

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Henri R. Bisson 1/3/97

Henri R. Bisson — Date
District Manager,
California Desert

COUNTY OF RIVERSIDE
PLANNING DEPARTMENT

Aleta J. Laurence 1/3/97

Aleta J. Laurence, A.I.C.P. — Date
Planning Director

BLM-CACA-30070
BLM-CACA-25594
BLM-CACA-31926

COUNTY OF RIVERSIDE

TRANSPORTATION AND
LAND MANAGEMENT AGENCY

Planning Department

Richard K. Lashbrook
Agency Director

Aleta J. Laurence
Director of Planning

FINAL ENVIRONMENTAL IMPACT REPORT NO. 397

Related Applications Covered by this E.I.R.

Specific Plan No. 305; Specific Plan No. 306; Comprehensive General Plan Amendment No. 402; Comprehensive General Plan Amendment No. 405; Change of Zone No. 6249; Change of Zone No. 6253; Revised Permit No. 158 to Reclamation Plan No. 107; Tentative Tract Map No. 28217, Amended No. 1; and Development Agreement No. 64.

State Clearinghouse No. 95052023

The Riverside County Planning Department certifies that this Final EIR is an objective and accurate statement that has been completed in compliance with the California Environmental Quality Act, the State EIR Guidelines, and the County Rules to Implement CEQA.

Aleta J. Laurence

Aleta J. Laurence, A.I.C.P., Planning Director

Dated: January 3, 1997

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Eagle Mountain Landfill Project, Riverside County, California
Final Environmental Impact Statement/Environmental Report
Issued: January 1997

Lead Agencies

U.S. Department of the Interior
Bureau of Land Management
California Desert District
Palm Springs—South Coast Resource Area
(NEPA Lead Agency)

County of Riverside
Riverside, California
(CEQA Lead Agency)

Cooperating Agencies: Biological Resources Division, U.S. Geological Survey; National Park Service

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ABSTRACT: The Eagle Mountain Project includes the development of a Class III nonhazardous solid waste landfill in the side canyons and open pit mine at the Eagle Mountains in Riverside County, California, and the renovation and resulting repopulation of the adjacent Eagle Mountain Townsite by Kaiser on property owned by Kaiser. The Project is located in the California Desert Conservation Area. Under the Federal Land Policy and Management Act, Kaiser Eagle Mountain, Inc., has applied for about 3,481 acres of Bureau of Land Management lands in exchange for about 2,486 acres of land currently owned by Kaiser. Also, a new FLPMA right-of-way would be issued for the entire length of the Eagle Mountain Railroad, the existing Eagle Mountain Road, and the proposed Eagle Mountain Road Extension. The landfill will comprise about 2,164 acres and an additional 2,490 acres will be used for landfill support facilities and open space. At full operation, the landfill will accept up to 20,000 tons of solid waste per day from seven Southern California counties for 117 years. Approximately 18,000 tons per day will be shipped in containers along the Southern Pacific Railroad to Ferrum Junction. From there, the trains will use the 52-mile Eagle Mountain Railroad to the Project site. A total of 2,000 tons per day of containerized waste will be delivered by truck. The Eagle Mountain Landfill Specific Plan amends the Riverside County General Plan and Zoning Ordinance and Map. The Eagle Mountain Townsite Specific Plan covers 429 acres, identifies the existing residential/commercial and circulation patterns in the Townsite, provides planning standards consistent with the infrastructure already located within the Townsite, and provides for improvements to the currently unoccupied housing stock similar to improvements made by Kaiser to the existing occupied homes. The alternatives considered in this EIS/EIR are: (1) No Action, (2) Reduced Volume of Onsite Disposal, (3) Alternate Road Access, (4) Rail Access Only, (5) Landfill on Kaiser Land Only, and (6) Landfill Development/No Townsite Development.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
California Desert District Office
6221 Box Springs Boulevard
Riverside, California 92507-0714

Dear Reader:

Attached is the Final Environmental Impact Statement and Environmental Impact Report (EIS/EIR) for the proposed Eagle Mountain Landfill and Recycling Center Project in Riverside County. This Final EIS/EIR includes minor changes to the Proposed Action based on public comment and updated information, as well as responses to all public comments and statements made at the four public hearings held on the project in August 1996, and written comments received on the Draft EIS/EIR.

The Bureau of Land Management (Bureau) served as the federal lead agency and the County of Riverside (the County) served as the state lead in the preparation of this document. The National Park Service and the Biological Resources Division of the United States Geological Survey were cooperating agencies. The joint document was prepared pursuant to the requirements of the National Environmental Policy Act and the California Environmental Quality Act (CEQA).

The attached environmental document represents the joint Final EIS/EIR. The Final EIS/EIR will be used by the Bureau and the County to decide the various discretionary actions required to implement the project. The Bureau's decisions will be identified in a Record of Decision. Statements on the EIS/EIR or the project will be accepted by the Bureau and considered in arriving at our decision on this proposed action.

The Final EIS/EIR is distributed for a 30-day notification period by the Bureau that begins January 24, 1997, and ends on February 22, 1997. Written information regarding the Final EIS/EIR should be submitted to the Bureau at the above address prior to February 22, 1997. The County of Riverside Planning Commission has tentatively scheduled three additional EIS/EIR public hearings on January 30, January 31, and February 5, 1997. The purpose of these hearings is for the Planning Commission to consider Project entitlements and to make recommendations to the Board of Supervisors on the certification of the EIR/EIS, in accordance with CEQA requirements, and the issuance of land use permits for the landfill and Townsite. If the components of the Project subject to County review are approved, a Statement of Overriding Considerations must be adopted by the County because the Final EIS/EIR identifies adverse impacts that cannot be reduced to below the level of significance.

We wish to thank those persons who have contributed their time and knowledge to this project. We appreciate your interest and your commitment to participating in this project.

Sincerely,

Henri R. Bisson
District Manager,
California Desert

SCO1001963D.DOC

EAGLE MOUNTAIN LANDFILL AND RECYCLING CENTER

VOLUME I

SUMMARY AND SUBSTANTIVE CHANGES TO THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/ ENVIRONMENTAL IMPACT REPORT

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VOLUME II

COMMENTS AND RESPONSES ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/ ENVIRONMENTAL IMPACT REPORT

Acronym List

AB	Assembly Bill
ACEC	Area of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
ADT	Average Daily Traffic
ac-ft	acre-feet
ac-ft/yr	acre-feet per year
ANDAOS	Areas Not Designated as Open Space
ANF	Angeles National Forest
AQMP	Air Quality Management Plan
ARB	Air Resources Board (State of California)
BACT	Best available control technology
BCMP Map	backcountry management planning map
BFI	Browning-Ferris Industries
bg	background
BLM	Bureau of Land Management
Board	Los Angeles Board of Public Works
BOD	biological oxygen demand
BP	before present
BTU	British thermal unit
CAA	Clean Air Act
CARB	California Air Resources Board
Caltrans	California Department of Transportation
CCR	California Code of Federal Regulations
CDCA	California Desert Conservation Area
CDCAP	California Desert Conservation Area Plan
CDFG	California Department of Fish and Game
CDPA	California Desert Protection Act
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFC	Chlorofluorocarbons
cfs	cubic feet per second
CFR	Code of Federal Regulations
CH_4	methane
CIWMB	California Integrated Waste Management Board
CIWMP	County of Riverside Integrated Waste Management Plan
cm/s	centimeters per second
cm/sec	centimeters per second
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
COD	Chemical oxygen demand

COE	U.S. Army Corps of Engineers
CORE	Conservation of Resources Task Group
COQ	Council on Environmental Quality
CoSWMP	Riverside County Solid Waste Management Plan
County	County of Riverside
Court	San Diego County Superior Court
CRIT	Colorado River Indian Tribes
cu ft/lb-yr	cubic feet per pound per year
CUP	Conditional Use Permit
CVAG	Coachella Valley Association of Governments
CVLUPA	Chuckwalla Valley Land Use Planning Area
CWA	Clean Water Act
dBA	A-weighted decibel
DOD	Department of Defense
DOI	Department of the Interior (United States)
DTSC	Department of Toxic Substances Control
EA	Environmental Assessment
ECEC	Eagle Crest Energy Company
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMEC	Eagle Mountain Energy Company
EMT	emergency medical technician
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
fg	foreground
FHWA	Federal Highway Administration
FLPMA	Federal Land Policy and Management Act
FONSI	finding of no significant impact
FPA	Federal Power Act
GCL	geosynthetic-clay liner
GMP	General Management Plan
gpd	gallons per day
gpd/ft	gallons per day per foot
gpm	gallons per minute
gWhrs	gigawatt hours
HCP	Habitat conservation plan
HDPE	high-density polyethylene
HHW	Household Hazardous Waste
HMA	Habitat Management Area
HSA	Hazardous Substance Account
HSAA	Hazardous Substance Account Act
IBLA	Interior Board of Land Appeals

JTNM	Joshua Tree National Monument
JTNP	Joshua Tree National Park
Kaiser	Kaiser Eagle Mountain, Inc.
KOP	key observation point
KV	kilovolt
KWh	kilowatt-hour
LCRS	Leachate collection and removal system
LEA	Local Enforcement Agency
L_{eq}	Equivalent noise level
LFG	landfill gas
L_{max}	Maximum noise level
LOS	Level of Service
LWRF	Local Waste Receiving Facility
MCL	maximum contaminant level
mg	middle ground
mg	million gallon
mgd	million gallons per day
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MMBtu	Million British thermal units
mmcfd	million cubic feet per day
MOU	Memorandum of Understanding
MPH	miles per hour
MRC	Mine Reclamation Corporation
MRF	Materials recovery facilities
MSHA	Mine Safety and Health Act
MSHCP	Multiple Species Habitat Conservation Plan
msl	mean sea level
MSW	Municipal Solid Waste
MTC	Management and Training Corporation
MVA	megavolt amperes
MW	megawatt
MW	monitoring well
MWD	Metropolitan Water District of Southern California
NAAQS	National Ambient Air Quality Standards
NBS	National Biological Service
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NMHC	non-methane hydrocarbons
NO	nitric oxide
NO_2	nitrogen dioxide
NOEP	Notice of Exchange Proposal
NOI	Notice of Intent
NOP	Notice of Preparation

NORA	Notice of a Realty Action
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPS	National Park Service
NSPS	new stationary pollutant source
NSR	New Source Review
O_3	ozone
OH	hydroxide
OPR	Office of Planning and Research (State of California)
OSHA	Occupational Safety and Health Act
P	piezometer
PA	Preliminary Assessment
PCBs	polychlorinated biphenyls
PM_{10}	10-micron particulate matter
ppm	parts per million
Project	Eagle Mountain Landfill and Recycling Center Project
PSD	Prevention of Significant Deterioration
PUC	Public Utilities Commission
RC district	Resource Conservation district
RCFCD	Riverside County Flood Control District
RCRA	Resource Conservation Recovery Act
RDSI	Report of Disposal Site Information
RECLAIM	Regional Clean Air Incentives Market
RFP	Request for Proposal
ROD	Record of Decision
ROG	Reactive organic gases
ROWD	Report of Waste Discharge
RTCF	Return-to-custody facility
RWQCB	Regional Water Quality Control Board
SANDER	San Diego Energy Recovery project
SBM	San Bernardino Meridian
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCGC	Southern California Gas Company
SDWA	Safe Drinking Water Act
SEDAB	Southeast Desert Air Basin
Service	Department of the Interior, Fish and Wildlife Service
SIP	State Implementation Plan
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SO_x	sulfur oxides
SP	Specific Plan

SPTC	Southern Pacific Transportation Company
SRRE	Source Reduction and Recycling Element
STLC	soluble threshold limit concentration
SWFP	Solid Waste Facilities Permit
SWMP	Solid Waste Management Plan
SWRCB	State Water Resources Control Board
RDSI	Report of Disposal Site Information
TCLP	(EPA's) toxicity characteristic leaching procedure
TDS	total dissolved solids
TOC	total organic carbon
TOX	total organic halides
Townsite	Eagle Mountain Townsite
tpd	tons per day
tpy	tons per year
TS	transfer station
TSP	total suspended particles
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage, and Disposal Facility
TSP	total suspended particles
TTLC	total threshold limit concentration
UGZMS	unsaturated gas zone monitoring system
URTD	upper respiratory disease
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geologic Survey
VEBA	Volunteer Employee Benefit Association
VERP	Visitor Experience/Resource Protection
VHD	vehicle hour of delay
VLDPE	very low density polyethylene
VOC	volatile organic compound
VRC	visual resource classes
VRM	visual resources management
WDR	Waste Discharge Requirements
WET	waste extraction test
WSA	Wilderness Study Area

1.0 Introduction

This Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) addresses the potential environmental effects that could result from implementing the proposed Eagle Mountain Landfill and Recycling Center Project (Eagle Mountain Project, or Project). The EIS/EIR has been prepared in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The United States Department of the Interior, Bureau of Land Management (BLM), is the lead federal agency for the NEPA process. The County of Riverside, California, (County) is the lead agency for the CEQA process. These agencies have independently evaluated, directed, and supervised the preparation of this document. The National Park Service (NPS) and the Biological Resources Division of the U.S. Geological Survey have participated as cooperating agencies under NEPA.

1.1 Format of The Final EIS/EIR

The Final EIS/EIR for the Eagle Mountain Landfill and Recycling Center Project has been prepared pursuant to the requirements of NEPA, which apply to the federal actions, and CEQA, which apply to the state and county actions. The abbreviated format used for this Final EIS/EIR complies with Council on Environmental Quality NEPA regulations (40 CFR 1503.4(c)) and State CEQA Guidelines, Section 15132.

The Final EIS/EIR comprises two volumes. This volume (Volume I) contains an introduction; a description of the Proposed Action and alternatives evaluated in the EIS/EIR; the identification of the NEPA Preferred Alternative and the CEQA Environmentally Superior Alternative; summaries of the environmental impacts and mitigation measures, changes made to the Draft EIS/EIR, consultation and coordination, and major comment areas; and appendices containing additional information, including the Mitigation Monitoring and Reporting Program.

Volume II of the Final EIS/EIR contains all public comments and letters received by the lead agencies about the Project and Draft EIS/EIR, reproduced with an identifying document number in the upper right-hand corner of the first page of each letter. Volume II also contains the Responses to Comments. Each letter in Volume II has numbered comments, with a corresponding response that answers the specific comments and issues raised in the letter. The comment letters and responses are preceded by an index that includes the document identification number for each letter and the name of the individual or agency who produced the letter of comment. To assist the reader in finding individual letters, the comments and responses are divided into five categories:

- Agencies
- Organizations
- Public Hearings (transcripts)
- Individuals

- Additional Correspondence Received After the Draft EIS/EIR Comment Period Closed

Numerous references are made throughout the Final EIS/EIR to the Draft EIS/EIR and to Volumes I and II of the Draft EIS/EIR Appendices. These documents were previously circulated and are not being reproduced. Copies, however, are readily available for inspection at the locations identified below in Section 5.4. The Draft EIS/EIR and supporting appendices, together with the two Final EIS/EIR volumes, constitute the full CEQA/NEPA documentation for the Project.

1.2 Background

The BLM and the County previously prepared a joint EIS/EIR for the Eagle Mountain Landfill project (Bureau of Land Management and County of Riverside, *Final Environmental Impact Statement/Environmental Impact Report for the Proposed Eagle Mountain Landfill Project,* June 1992). The Riverside County Board of Supervisors certified this EIS/EIR on November 3, 1992. The BLM issued its Record of Decision (ROD) approving the land exchange and the associated rights-of-way on October 20, 1993.

In December 1992, three actions were filed with the San Diego County Superior Court (Court) challenging the County's certification of the previous EIS/EIR and associated project approvals. On July 26, 1994, the state Court issued Statements of Decision in the three cases, finding that the EIR was deficient in certain specific areas. The Court ordered the County to take specific actions to bring its certification and project approvals into compliance with CEQA, including full analysis of the impacts of: (1) the proposed Project on the desert tortoise, including the effectiveness of mitigation measures; (2) potential seismic activity on the landfill; (3) the proposed Project on neighboring Joshua Tree National Monument (now Park); and (4) Level I Contaminant Surveys conducted by the BLM in connection with the proposed land exchange. In addition, the state Court specified that the new EIR: (1) provide a Project Description that would include the neighboring Townsite; (2) analyze the cumulative impacts of the proposed Eagle Mountain Landfill Project and Eagle Crest Energy Company (ECEC) proposed hydroelectric project; (3) disclose the County's opposition to the ECEC hydroelectric project; and (4) evaluate the feasibility of the mitigation measures for the proposed Project in light of the cumulative impacts analysis and the proposed land exchange between Kaiser and the BLM. As a result of this ruling, the County withdrew its previous approvals for the Project.

After the BLM issued its ROD in 1993, appeals were filed with the Department of Interior's Interior Board of Land Appeals (IBLA) challenging the BLM's decision. On March 13, 1995, after the County had voided and set aside its previous project approvals and it was determined that a new EIR would be prepared in accordance with the Court decision, the BLM requested that the IBLA remand the ROD to the BLM. The IBLA granted the BLM's request for remand, which facilitated the BLM joining the County in its additional environmental review.

The present EIS/EIR has been prepared in response to the Writ of Mandate issued to the County by the San Diego County Superior Court to address the specific deficiencies of the previous (June 1992) EIR. The primary differences in the current Project design in comparison with the design proposed in the previous (June 1992) EIS/EIR include:

- Modification of the landfill liner and final cap design
- Change in the area from which waste will be accepted from four counties (i.e., Riverside, San Bernardino, Los Angeles, and Orange) to seven counties (i.e., the original four counties plus Ventura, Santa Barbara, and San Diego Counties) without an increase in the maximum daily waste to 20,000 tpd.
- Development of separate land use applications for the Eagle Mountain Townsite and the proposed landfill
- Incorporation of additional landfill gas and leachate monitoring systems into the design
- Operation of the landfill primarily during daylight hours rather than only during daylight hours

1.3 Actions Covered by This EIS/EIR

1.3.1 Federal Actions/Approvals

Federal actions associated with the proposed Project comprise the following elements:

- Bureau of Land Management: Land Exchange and Grants of Rights-of-Way under the Federal Land Policy Management Act
- Army Corps of Engineers: Section 404 Permits for activities within the jurisdictional waters or headwaters of the United States

  On December 13, 1996, the Army Corps of Engineers published new Nationwide Permit regulations, reissuing most nationwide permits for an additional 5-year period commencing February 11, 1997. Nationwide Permit No. 26 was reissued for an interim period of 2 years, after which time the Cops plans to replace this nationwide permit with activity-specific nationwide permits. During this interim period, Nationwide Permit Number 26 will authorize discharges of dredged or fill material that do not adversely affect more than 3 acres of jurisdictional waters of the United States, located above the headwaters. For projects affecting greater than 1/3 of an acre of jurisdictional waters, a preconstruction notification to the Corps will be required. The Army Corps of Engineers permitting requirements are discussed at Section 1.4.2.2 of the Draft EIS/EIR.

- Fish and Wildlife Service: Section 7 Consultation and Opinion under the Endangered Species Act

1.3.2 State Actions/Approvals

The following State of California approvals are necessary to develop and operate the Eagle Mountain Landfill. To obtain most of these permits, the landfill must first be approved and an EIR certified by the local jurisdiction, in this case the County of Riverside.

- California Regional Water Quality Control Board/State Water Resources Control Board
  - Waste Discharge Requirements
  - Section 401 Water Quality Certification
  - National Pollutant Discharge Elimination System (NPDES) Permit
- South Coast Air Quality Management District
  - Thirteen (13) different air emission permits for stationary equipment
- California Department of Fish and Game (CDFG)
  - Section 1603 Streambed Alteration Agreement
  - Section 2081 Game Management Agreement
- California Integrated Waste Management Board (CIWMB)
  - Concurrence in issuance of Solid Waste Facility Permit

1.3.3 Local Actions/Approvals

The proposed County action involves reviewing land use permit applications pertaining to the proposed landfill and the Townsite. MRC must obtain approvals of the following land use permit applications from the County for the landfill:

- Specific Plan No. 305
- General Plan Amendment No. 402
- Change of Zone No. 6249
- Development Agreement No. 64
- Revised Permit No. 158 to Reclamation Plan No. 107

In addition, Kaiser must obtain approvals for the following land use permit applications from the County for the Townsite:

- Specific Plan No. 306
- General Plan Amendment No. 405
- Change of Zone No. 6253
- Tentative Tract Map No. 28217

The County of Riverside Department of Environmental Health acts as the Local Enforcement Agency (LEA) for the CIWMB and is responsible for writing and issuing a solid waste facility permit to operators of solid waste facilities including landfills within Riverside County. MRC must obtain this approval after all permits are issued.

2.0 Description of Proposed Action

2.1 Purpose and Need

In 1992, the California Integrated Waste Management Board (CIWMB) reported that there was a critical landfill capacity shortfall, with 70 percent of California's counties expected to have fewer than 15 years of remaining disposal capacity. Ten of the counties, comprising approximately 40 percent of the state's population, had fewer than 5 years of landfill disposal capacity.

Several recent studies documenting the need for additional landfill capacity in Southern California indicate that additional capacity is needed to meet the long-term demands (i.e., 1995 to 2050) and possible short-term needs (i.e., 1995 to 2000) of the Southern California region (California Integrated Waste Management Board [CIWMB], 1992; CIWMB, 1994, Draft Countywide Siting Elements—for the seven counties viewed as potential sources of waste for the proposed landfill—1995 and 1996). Additional capacity is also required for counties and municipalities in Southern California to satisfy the legal requirements of AB 939 to demonstrate adequate waste disposal capacity. The solid waste capacity in Southern California changes often due to a number of factors, including: (1) the closure of small, inefficient landfills as new regulations take effect; (2) the development of larger regional sites; (3) the uncertainty of permitting efforts of new and expanded landfills; (4) litigation over land use issues of landfills and (5) the privatization of publicly owned landfills. These factors necessitate that cities and counties undertake long-term planning to ensure that adequate capacity is available.

Since the Draft EIS/EIR was released in July, 1996, several landfills in the Southern California region have closed, and some have been expanded (Table 2-1). The Azusa Landfill (6,000 tons per day [tpd]) in Los Angeles County, the Lopez Canyon Landfill (permitted for 4,000 tpd) in the San Fernando Valley region of Los Angeles, the Bailard Landfill (1,500 tpd) in Ventura County, and the BKK Landfill (13,200 tpd), located near the City of West Covina, have closed. The San Marcos Landfill (3,000 tpd) in San Diego County, is scheduled to close in early 1997. Elsmere Canyon, a regional landfill site proposed for the Angeles National Forest that would have required a land exchange with the U.S. Forest Service, cannot now occur as a result of recent federal legislation. Acting in response to court order, the Regional Water Quality Control Board (RWQCB) recently ordered the Azusa Landfill (6,000 tpd), to cease accepting municipal solid waste. Moreover, on November 11, 1996, the Los Angeles County Public Works Department announced that it was no longer considering Mission, Rustic, and Sullivan Canyons as candidate sites for Los Angeles County landfills.

The Sunshine Canyon Landfill expansion in unincorporated Los Angeles County was approved in 1996 and the expansion area opened in September, 1996, resulting in additional capacity of 6,000 tpd. The Toland Road Landfill was recently approved for expansion by Ventura County; current expansion scenarios for that project include 17 years at 850 tpd or

12 years at 1,200 tpd. A decision by the Riverside County Board of Supervisors has been postponed and will not be rendered before the end of April, 1997, on the proposed El Sobrante Landfill Expansion Project in Western Riverside County (an expansion from 4,000 tpd to 10,000 tpd, and from 8 million tons of capacity to 108 million tons of capacity).

In total, since the Draft EIS/EIR was published in July, 1996, there has been a decrease of 27,700 tpd of potential future landfill disposal capacity, and about 7,200 tpd of additional capacity has been approved as a result of landfill expansions (see Table 2-1).

Table 2-1
Update on Southern California Disposal Capacity Changes Subsequent to Eagle Mountain Landfill and Recycling Center Project Draft EIS/EIR

Decreased Capacity			Increased Capacity		
Landfill	**County**	**Capacity (tpd)**	**Landfill**	**County**	**Capacity (tpd)**
Azusa (closed)	Los Angeles	6,000	Toland	Ventura	1,200
Lopez (closed)	Los Angeles	4,000	Sunshine	Los Angeles	6,000
Bailard (closed)	Ventura	1,500			
San Marcos[a]	San Diego	3,000			
BKK (closed)	Los Angeles	13,200			
	Total	**27,700 tpd**		**Total**	**7,200 tpd**

[a] Due to close 3/11/97; may be extended.

2.2 Description of the Proposed Action

Mine Reclamation Corporation (MRC) and Kaiser Eagle Mountain, Inc., wholly-owned subsidiaries of Kaiser Ventures Inc., propose to develop the Eagle Mountain Project on a portion of the Kaiser Eagle Mountain Mine in the County of Riverside, California (Figure 2-1). Kaiser currently owns portions of the Project site; the remainder of the site is owned by the United States Government but subject to Kaiser mining claims. These federally owned lands are proposed to be conveyed to Kaiser by the BLM in exchange for lands owned by Kaiser along the existing Eagle Mountain Railroad. Portions of the proposed landfill site are within the Eagle Mountains, and the site is bordered on the north, west, and southwest by Joshua Tree National Park (JTNP), and on the east and southeast by the Chuckwalla Valley. The legal description of the BLM lands to be transferred to Kaiser is in Appendix Z.

The proposed Eagle Mountain Project includes two major components: (1) development of a Class III nonhazardous municipal solid waste landfill to be operated by MRC, and (2) the renovation and subsequent repopulation of the existing Eagle Mountain Townsite (Townsite), which is owned by Kaiser, adjacent to the proposed landfill site.

2.2.1 Eagle Mountain Landfill

The Eagle Mountain Landfill is proposed to be primarily a waste-by-rail facility, designed to meet a significant portion of Southern California's long-term municipal solid waste disposal needs. Figure 2-2 shows the projected waste flow volumes for the seven-county wasteshed area in Southern California during the anticipated life of the Project. The analyses conducted for this EIS/EIR are based on a total landfill life of approximately 117 years. The amount of waste anticipated to be accepted at the proposed landfill will increase incrementally during the first 25 years of operation: approximately 4,500 tons per day (tpd) for Years 1 through 4; 8,200 tpd for Years 5 through 9; 12,100 tpd from Year 10 through 14; and 16,000 tpd for Years 15 through 24. After this time, the landfill is anticipated to accept up to 20,000 tpd of municipal solid waste for the remaining years of operation. The total disposal capacity of the landfill will be approximately 708 million tons.

The site of the proposed Project is bordered on the north, west, and southwest by the JTNP and Eagle Mountains, and on the east and southeast by the Chuckwalla Valley. The southern boundary of JTNP in the Pinto Basin lies within approximately 1.5 miles of the Eagle Mountain Project site. The site of the proposed landfill encompasses approximately 4,654 acres. Of this acreage, approximately half (2,164 acres) will be used for actual disposal of waste, while the remaining acreage (approximately 2,490 acres) will be used for buffer areas and ancillary facilities. The majority of the waste to be received at the landfill will be transported by train via the Union Pacific (formerly the Southern Pacific) rail system and an existing 52-mile, Kaiser-owned rail line that extends from Ferrum Junction to the Eagle Mountain Mine. Of the remaining waste received at the proposed landfill and not transported by train, most will be transported by transfer trucks in enclosed waste-haul trailers; only a small percentage of waste will be accepted at the landfill site from self-haul, commercial operations serving local communities within the Chuckwalla Valley area. Waste transported to the Project site, whether by train or by transfer truck, will be transported in enclosed containers.

2.2.2 Eagle Mountain Townsite

The Eagle Mountain Project also includes the planned renovation and repopulation of the adjacent Kaiser-owned Townsite to provide housing for landfill workers and their families. The Townsite is an existing, but underutilized, former mining community located directly south of the Eagle Mountain Landfill site on approximately 429 acres. At the height of mining operations in the 1960s and 1970s, approximately 3,700 people lived in the Townsite. The Townsite contained residential development, schools, churches, commercial development, and a full range of utilities and services. Currently located in the Townsite is a privately operated community correctional facility that operates under a Public Use Permit from the County of Riverside and under contract with the California Department of Corrections.

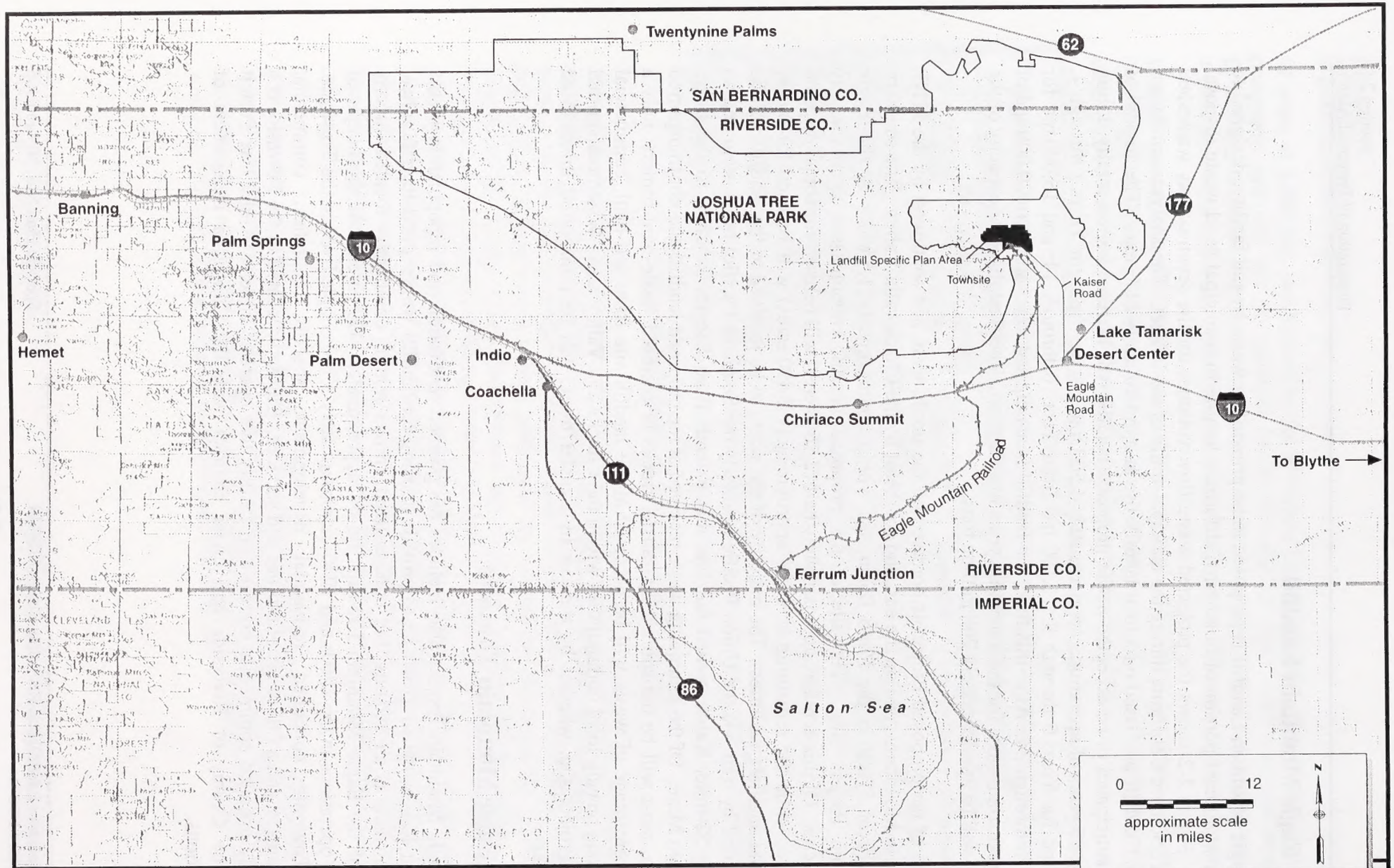
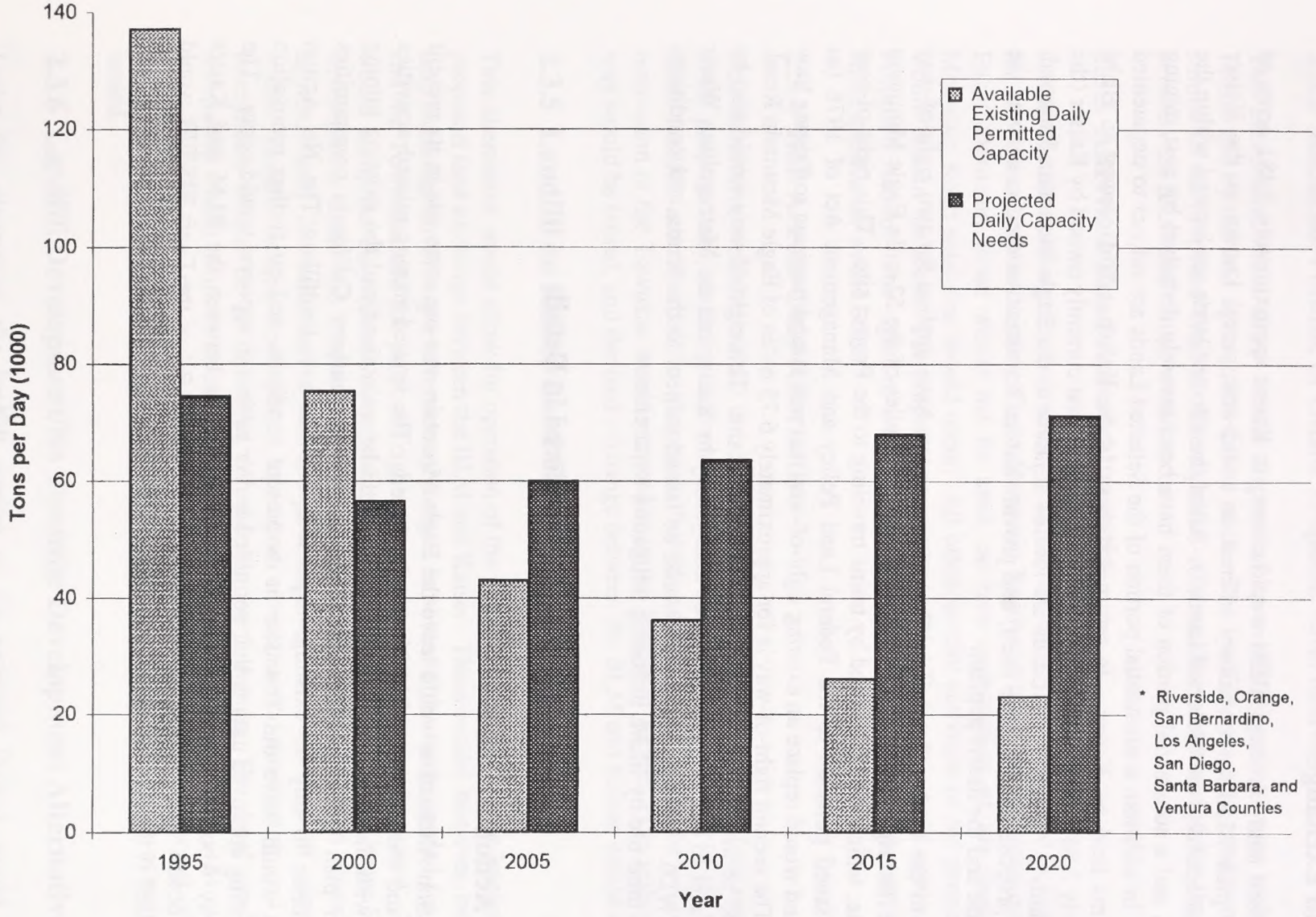


Figure 2-1
Regional Setting
Eagle Mountain Landfill and Recycling Center EIS/EIR

CH2M HILL



Source: Draft Countywide Siting Element for the Counties of Los Angeles (January 1996); Orange (February 1995); Riverside (January 1996); San Bernardino (November 1995); Santa Barbara (April 1996); San Diego (August 1995) and Ventura (August 1995) for the Years 1995 through 2010, extrapolated to the Years 2015 and 2010.

Figure 2-2
Combined Projected Disposal Capacity Needs and Available Capacity (1995-2020) for the Seven-County* Wasteshed Area
Eagle Mountain Landfill and Recycling Center EIS/EIR

2.2.3 Land Exchange

In the proposed land exchange, BLM would convey to Kaiser approximately 3,481 acres of public land plus BLM's reversionary interest in a 465-acre parcel known as the Kaiser campsite (collectively, the "Selected Lands"). All of the selected lands are located within the Project site, and a substantial portion of them have been severely disturbed by past mining operations. In addition, a substantial portion of the Selected Lands are subject to unpatented mining claims held by Kaiser. In return for these lands, Kaiser would convey to BLM approximately 2,846 acres of land containing sensitive habitat currently owned by Kaiser (the "Offered Lands"). The Offered Lands are located adjacent to the Eagle Mountain Railroad, outside the proposed landfill site itself, and provide habitat for sensitive species such as the desert tortoise and the desert pupfish.

In addition to the land exchange, the Project proponents have applied for two right-of-way grants. The first right-of-way is for approximately 28.6 miles of the 52-mile Eagle Mountain Railroad line, which would be used by trains traveling to the Project site. This right-of-way would be issued pursuant to the Federal Land Policy and Management Act of 1976 (as amended) and would replace an existing right-of-way that was issued pursuant to Private Law (PL) 790. The second right-of-way is for approximately 6.75 miles of Eagle Mountain Road, which would be used by trucks traveling to the Project site. This right-of-way would also be issued pursuant to FLPMA, and would be held jointly by Kaiser and the Metropolitan Water District (MWD). Both rights-of-way would be issued subject to the terms and conditions imposed on their use by BLM, including mitigation requirements.

2.3 Alternatives Considered in Detail

2.3.1 No Action Alternative

The No Action Alternative would leave the Eagle Mountain iron-ore mine site in its present condition, and the landfill would not be developed. The limited mining-related activities associated with the former mining operations would be maintained and the existing mining reclamation plan would continue to be implemented. Southern California communities would continue to rely on existing, expanded, or other new landfills. The No Action Alternative would leave the Townsite in its present condition, and no further renovation beyond existing approved uses or that permitted and/or subject to approval would occur. The rights-of-way would not be issued, and the land exchange between the BLM and Kaiser would not occur. The other objectives listed in Section 1.3.2.1 of the Draft EIS/EIR would not be realized if the No Action Alternative were chosen.

2.3.2 Reduced Volume of Onsite Disposal Alternative

This alternative would allow for the disposal of up to 16,000 tpd of waste including up to 14,000 tpd by rail and up to 2,000 tpd by truck. The landfill operating conditions would be similar to the proposed Project. The rights-of-way would be issued, and the land exchange between the BLM and Kaiser would occur.

2.3.3 Alternate Road Access Alternative

Under this alternative, transfer trucks would use the existing Kaiser Road to bring waste to the site instead of the existing Eagle Mountain Road and its proposed extension. Because Eagle Mountain Road would not be used, no new construction of the proposed Eagle Mountain Road extension would occur. All other landfill activities of the proposed Project would remain the same. The proposed renovation of the Townsite would proceed as in the Proposed Action. The rights-of-way would be issued, and the land exchange between the BLM and Kaiser would occur.

2.3.4 Rail Access Only Alternative

This alternative would eliminate the use of all non-Chuckwalla Valley refuse-hauling trucks to the proposed site, resulting in a reduction in the capacity of the landfill to 18,000 tpd. All other landfill activities of the proposed Project would remain the same. The proposed renovation of the Townsite would proceed as in the Proposed Action. The railroad right-of-way would be issued, and the land exchange between the BLM and Kaiser would occur.

2.3.5 Landfill on Kaiser Land Only Alternative

This alternative would allow for operation of the proposed landfill without implementing the proposed land exchange between the BLM and Kaiser. There would, however, be a modified land exchange involving a reversionary interest in some of the lands needed for the landfill and the Townsite, and the proposed rights-of-way would still be implemented. The landfill would comprise only Kaiser-owned lands in and around the East Pit (Phase 5 of landfill development under the Proposed Action). The landfill footprint would cover an area of approximately 289 acres and would accept a maximum of 10,000 tpd of municipal solid waste. Landfill design, development, operation, environmental monitoring, and closure and postclosure would be as described for the Proposed Action. The final grades for this alternative would result in an airspace of almost 183 million cubic yards (151 million tons). This alternative would have an estimated site life of 39 years. The proposed renovation of the Townsite would proceed as in the Proposed Action and the rights-of-way would be issued.

2.3.6 Landfill Development/No Townsite Development Alternative

Under this alternative, the landfill portion of the proposed Project would proceed as proposed, but the Townsite Specific Plan would not be approved, and renovation of existing structures of the Townsite would not occur within the existing Townsite. No improvements

to existing conditions would be made within the Townsite, but federal land use approvals would proceed (i.e., the rights-of-way would be issued and the land exchange between the BLM and Kaiser would occur). The existing Townsite would remain essentially unchanged from the existing condition.

2.4 Alternatives Considered but Eliminated from Further Consideration

In addition to the alternatives discussed above and evaluated in this EIS/EIR, a number of other possible alternatives were considered but eliminated from further consideration because it was determined that they would not reasonably or feasibly accomplish the primary objectives of the Proposed Action. The following eliminated alternatives are discussed in this EIS/EIR: (1) Landfill on Other Kaiser Property; (2) Waste Diversion; (3) Proposed Offsite Landfill Locations; (4) Landfill Mining; (5) Alternative Townsite Locations; (6) Alternative Townsite Land Use and Densities.

2.5 BLM Preferred Alternative

The BLM did not identify a preferred alternative in the Draft EIS/EIR, in conformance with the CEQ regulations, and indicated that a preferred alternative would be identified after public comments on the Draft EIS/EIR were available. After consideration of all comments received and the comments of cooperating agencies, BLM has determined that the preferred alternative for the Eagle Mountain Landfill and Recycling Project is the Proposed Action. The Proposed Action includes all mitigation measures contained in the monitoring program in Appendix M and summarized in Table 2-1 at the end of this section.

2.6 CEQA Environmentally Superior Alternative

Pursuant to CEQA, the County has determined that the environmentally superior alternative is the No Action Alternative. The No Action Alternative would leave the Project site in its present condition and avoid the potential impacts of the proposed landfill. The No Action Alternative could, however, lead to its own adverse impacts, such as the adverse visual impact of the disturbed mining site and the remaining tailing piles. Also, the potential impacts associated with continued reliance on new or existing landfills in Southern California could be substantial, such as air quality impacts or groundwater impacts at existing unlined landfills. In addition, the other objectives of the Project as listed in Sections 1.3.2.1 and 1.3.2.2 would not be realized if the No Action Alternative were chosen. However, with respect to impacts in the vicinity of the Project site, the No Action Alternative is, on balance, the environmentally superior alternative.

Where the No Project Alternative is determined to be the environmentally superior alternative, CEQA requires that an environmentally superior alternative be selected from the remaining alternatives. There are no clearly environmentally superior alternatives compared to the No Action Alternative. However, as required by Section 15126(d)(4) of the CEQA

Guidelines, the County has determined that, on balance the Proposed Action Alternative is the environmentally superior alternative among the remaining alternatives. Many of the potential impacts of the proposed Project are the same or similar to the potential impacts of the remaining alternatives. Some alternatives would, however, have a greater level of impacts than the proposed Project. For example, the Landfill on Kaiser Land Only Alternative without the land exchange would diminish the protection of habitat and wildlife because there would be no consolidation of sensitive habitat lands resulting from the land exchange. That alternative and the Reduced Volume Alternative would also decrease the level of contribution to the Environmental Mitigation Trust Fund, thus diminishing the funding available for acquisition of habitat lands. The Reduced Volume Alternative and the Rail Access Only Alternative could also extend the duration of certain impacts by extending the life of the landfill. These other alternatives, however, could reduce the level of a few impacts in comparison to the proposed Project. Only the No Action Alternative would result in impacts considered not to be significant.

2.7 Summary of Project Impacts, Mitigation, and Monitoring

The EIS/EIR has analyzed potential impacts to the environment from the proposed Project in accordance with NEPA and CEQA and identified mitigation measures that would reduce these potential impacts. The following summaries describe: (1) areas of no significant impact with mitigation; (2) cumulative impacts; and (3) impacts that cannot be mitigated. Table 2-2 at the end of this section contains a summary of all impacts and mitigation for the Project and the alternatives.

2.7.1 Areas of No Significant Impact with Mitigation

With the implementation of specific recommended mitigation measures identified in Appendix M of the Final EIS/EIR, no significant environmental impacts associated with the proposed Project and alternatives are expected in the following environmental resource areas: (the locations within the Draft EIS/EIR and Final EIS/EIR, Appendix M of the impact discussion and mitigation measures are noted in parentheses).

- Groundwater Quality and Use (Draft EIS/EIR Section 4.1; Appendix M, Table A)
- Public Health and Safety (Draft EIS/EIR Section 4.2; Appendix M, Table B)
- Land Use (Draft EIS/EIR Section 4.5; Appendix M, Table E)
- Surface Water Drainage and Flooding (Draft EIS/EIR Section 4.6; Appendix M, Table F)
- Biological Resources (except for impacts to bats, Draft EIS/EIR Section 4.7; Appendix M, Table G)
- Geology and Mineral Resources (Draft EIS/EIR Section 4.9; Appendix M, Table H)
- Visual (Draft EIS/EIR Section 4.10; Appendix M, Table I)

- Wilderness (except for wilderness experience, Draft EIS/EIR, Section 4.11; Appendix M, Table I)
- Utilities and Services (Draft EIS/EIR, Section 4.13; Appendix M, Table J)
- Paleontology (Draft EIS/EIR, Section 4.15, Appendix M, Table L)

2.7.2 Summary of Cumulative Impacts

Cumulative impacts depend upon future uses of the area, such as possible increased agricultural activity, JTNP projects and improvements, other regional landfills in the Southern California Region, or the construction of Eagle Crest Energy Company's (ECEC's) proposed hydroelectric project. There are no other known proposed projects within 30 miles of the proposed Project. Increased air emissions in both the South Coast Air Basin and the Southeast Desert Air Basin would be the most significant cumulative effect resulting from the proposed Project and other projects of a regional nature. In addition, increased regional water consumption from either an increase of agricultural activity to historically high levels and/or development of the ECEC proposal to operate a pumped storage hydroelectric project would be a significant cumulative impact.

The cumulative impacts considered significant after mitigation are air quality (because the proposed Project is located within a nonattainment air basin) and groundwater use.

2.7.3 Impacts that Cannot be Mitigated

The projected increases in air emissions within the South Coast Air Basin resulting from the long-distance transport of solid waste and the incremental increase of emissions in the Southeast Desert Air Basin cannot be entirely avoided even with mitigation. Proposed mitigation measures include: compliance with state and federal on- and off-road vehicle emission regulations; preferential use of "clean fuel" as appropriate; preferential use of low- or zero-emission vehicles; active dust suppression; evaluation of effectiveness of dust suppression program; selective vehicle/equipment shutdowns; and BACT for LFG recovery. Additional contractual obligations pursuant to the Agreement with the National Park Service (NPS) (see Section 2.8, below) include requesting air emission offsets from SCAQMD for gas flare stations; commitment to reduce onsite vehicle NOx emissions to 226 tons per year; installation of air quality, visibility, and meteorology monitoring stations at locations jointly determined with JTNP; implementation of protocols jointly with NPS to measure visibility impacts; minimize odor impacts so as not to be noticeable at JTNP; minimization of the number of municipal waste containers and control of animal access.

Impacts to resource components that comprise wilderness resources (e.g., visual resources) can be quantitatively assessed using measurable significance standards based on CEQA guidelines and can be mitigated to a level below significance. The intangible components of the wilderness experience (e.g., peace, solitude), however, cannot be quantitatively evaluated. Because of the subjective nature of the intangible part of the wilderness experience, these qualitative indicators of an individual's personal feelings in a wilderness setting cannot be

specifically defined using quantitative significance criteria. Therefore, a mandatory finding of significance is appropriate for the wilderness experience.

Impacts to the California leaf-nosed bat and the Townsend's big-eared bat cannot be mitigated to below the level of significance. Even with the implementation of mitigation measures (which include reopening the Black Eagle adit and constructing a new adit if necessary, which is an additional mitigation since the Draft EIS/EIR), the potential exists for a loss in the local populations of these species. Additional mitigation measures for these species, including identification and protection of suitable roosting and/or maternity habitat, could be identified on the basis of information collected during monitoring of summer and winter populations of these species using mitigation trust funds.

2.8 Agreement between the National Park Service and the Project Proponents

Throughout the period of environmental analyses for this Project and preparation of the EIS/EIR, Kaiser/MRC and the NPS have continued to discuss the potential for the Project to have impacts upon JTNP. The NPS participated in the preparation of the Draft and Final EIS/EIR as a cooperating agency under NEPA. The NPS has commented on the Draft EIS/EIR and responses to its comments are in Response to Comments 1A to 1G and 1-1 through 1-182 of this EIS/EIR.

On December 9, 1996, the NPS and Kaiser/MRC executed an Agreement (Appendix T) that would become effective upon completion of the land exchange. The Agreement details additional contractual obligations and funding mechanisms that would be undertaken if the landfill is authorized to proceed. As a result of this Agreement, Kaiser/MRC recognizes the NPS's concerns about the Project, and agrees upon means to further protect and preserve resources of JTNP in the event that the Project is authorized to proceed. These contractual obligations do not alter the analyses and conclusions in the Draft EIS/EIR.

The NPS states in the Agreement with Kaiser/MRC that with the implementation of these contractual obligations and funding mechanisms (Appendix T), the EIS/EIR is "a complete analysis of the known effects of the Project upon the environment." Further, the NPS states that the proposed measures, if implemented, would further reduce the potential effects of the Project on JTNP (with the exception of potential effects on the wilderness experience) and that such potential effects would be below the levels of significance required in the California Environmental Quality Act (CEQA).

The Agreement states that the location of the Project in relationship to JTNP has the potential to cause unknown or unpredictable long-term impacts or intrusions to JTNP's resources and to place an additional funding burden on NPS to develop new scientific information, to undertake research, and to implement additional efforts to monitor and address possible impacts associated with the Project. Funds from the Eagle Mountain Environmental Mitigation Trust (Trust) (as required by the USFWS and funded by the Project) will be used to monitor and, if necessary, mitigate long-term impacts. The Trust, which would be

administered by the County of Riverside, directs how the funds are to be used. The Draft Trust is in Appendix U of the EIS/EIR.

The obligations enumerated in the Agreement include the following (the details of the measures are provided in the Agreement itself, which is included in the Final EIS/EIR as Appendix T):

- Odor Control The Project shall be operated in a manner that minimizes landfill and waste odors such that Park visitors and employees shall not be subjected to noticeable odor levels. Kaiser/MRC shall minimize the number of municipal waste containers waiting in staging areas and monitor and control animal access to containers waiting to be placed in the landfill.

- Air Quality Kaiser/MRC shall request the South Coast Air Quality Management District (SCAQMD) to provide air offset credits from SCAQMD's priority reserve for each gas flare station prior to construction. Kaiser/MRC agree to reduce the Project's onsite vehicle NOx emissions (though a combination of new technologies, cleaner fuels, and operational changes) to 226 tons per year. Kaiser/MRC shall install and maintain, beginning 6 months prior to commencement of Project operations, a visibility monitoring station within JTNP; two air pollutant monitoring stations to monitor ozone, NO_2, and PM_{10}; and a Project site weather station. Kaiser and MRC shall jointly develop a protocol for determining baseline visibility levels at the visibility monitoring station and for determining visibility impacts. If significant visibility impacts are determined, Kaiser/MRC shall implement additional measures.

- Night Sky Protection Kaiser/MRC shall shield all lights within the Project area, and use low pressure low sodium lights (or their functional equivalent) or mercury lights. All existing lights in the Project area shall be retrofitted with low pressure sodium lights, except in areas where worker safety requirements mandate other types of lighting.

- Windblown Debris Kaiser/MRC undertake the obligation to assure that there is no windblown litter from the Project detectable in JTNP.

- Desert Tortoise Kaiser/MRC shall conduct and continue the existing raven monitoring program and a predator monitoring program commencing at least twelve months prior to the commencement of operations and continuing for a period of at least 10 years. Kaiser/MRC shall institute additional active predator control measures, if necessary, in consultation with the NPS. MRC/Kaiser shall fence the perimeters of all active landfilling and waste management areas with fencing designed to exclude large scavengers and place at least 6 inches of cover material over deposited and compacted waste on a daily basis. Kaiser/MRC shall conduct a non-lethal predator control program that shall include at a minimum hazing, coyote and kit fox aversive conditioning, prompt removal of road-killed wildlife, and the possible use of the bird repellent methyl anthranilate.

- Nelson's Bighorn Sheep Kaiser/MRC shall pay for the acquisition and installation of new water sources at locations outside JTNP to be determined in consultation among Kaiser/MRC, the NPS, the BLM, and the California Department of Fish and Game.

- Land Protection Kaiser/MRC shall provide funds to the National Park Foundation (NPF) through the Environmental Mitigation Trust (Appendix U of the Final EIS/EIR). Kaiser/MRC shall offer to convey all of the fee lands owned by Kaiser within the JTNP (approximately 190 acres) at no cost to the NPS.

- Water Resources Kaiser/MRC shall prepare and review and agree with the NPS on a plan to monitor the possible effects of groundwater withdrawal in the Chuckwalla Valley associated with the Project on groundwater resources of the Pinto Basin. MRC/Kaiser shall fund the establishment and operation of long-term groundwater monitoring sites. If the data demonstrate significant impacts to NPS water sources in the Pinto Basin have occurred and are solely attributable to the Project, Kaiser/MRC, in cooperation with the NPS, shall modify its groundwater pumping regime to eliminate significant impacts attributable to the Project. Kaiser/MRC agree not to use water from the Pinto Wells located within JTNP for any purposes related to the Project.

- Noise Kaiser/MRC shall provide for the establishment and operation of an ambient noise monitoring program subject to review and approval by the NPS; Kaiser/MRC will also incorporate new technology to reduce noise from Project operation to the maximum extent feasible.

- Research Ten percent of the funds collected by the Environmental Mitigation Trust shall be paid to the NPF, to be used for land acquisition, long-term research monitoring, and increased NPS resource management capabilities. Kaiser/MRC shall provide the NPF an advance of $75,000 per year for two years beginning upon completion of the land exchange with BLM, to be paid from the Environmental Mitigation Trust. Kaiser/MRC shall also provide a one-time grant to the NPF of $100,000 payable upon commencement of Project operations. Kaiser/MRC shall provide the NPS with approximately 800 square feet of office space and 1,500 square feet of living space at the Townsite or the Project site.

It is important to note that the adoption of the additional obligations agreed upon between the NPS and Kaiser/MRC do not change any of the environmental analyses contained in the EIS/EIR or its conclusions regarding the significance of impacts.

2.9 Metropolitan Water District of Southern California

The Metropolitan Water District of Southern California (MWD), in its comment letter on the Draft EIS/EIR (Comment Letter 10), requested that the Final EIS/EIR clarify several points regarding the location of the Project relative to MWD lands, the relationship between Kaiser/MRC and MWD, and the measures agreed upon between Kaiser/MRC and MWD. The memorandum of understanding (MOU, December 14, 1992) between Kaiser/MRC and

MWD is presented in Appendix Y of the Final EIS/EIR, and the measures it identifies are adopted as measures in this EIS/EIR.

2.10 Revised Mitigation Measures

In addition to the contractual obligations identified in the Agreement between the NPS and Kaiser/MRC and the MOU between Kaiser/MRC and the MWD described above, revised mitigation measures have been incorporated into the Project description. These measures are summarized in Table 2-2 (Summary of Impacts and Mitigation) and are listed in full in the Mitigation Monitoring and Reporting Program (Appendix M).

Table 2-2
Summary of Project and Alternatives' Impacts, Mitigation, and Additional Obligations

Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
GROUNDWATER QUALITY AND USE (DRAFT EIS/EIR SECTION 4.1; APPENDIX M, TABLE A)							
Groundwater Quality							
Impact	Potential for degradation of groundwater due to migration of leachate	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Landfill liner system; Leachate collection and removal system; Vadose zone monitoring system; onsite groundwater monitoring system; Final cover, **offsite groundwater monitoring**	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Impact	Slight potential for degradation of groundwater due to migration of landfill gas (LFG)	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	LFG containment and control system; Vadose zone monitoring system; Landfill liner system	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Impact	Potential degradation of groundwater due to contaminant releases from landfill-support facilities	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Regulatory compliance for hazardous substance containment, monitoring, and reporting	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Groundwater Use							
Impact	No significant impacts requiring mitigation identified	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
PUBLIC HEALTH AND SAFETY (DRAFT EIS/EIR SECTION 4.2; APPENDIX M, TABLE B)							
Hazardous Substances							
Impact	Potential for exposure to hazardous substances at equipment maintenance facilities, and working face of landfill	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project

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Table 2-2
Summary of Project and Alternatives' Impacts, Mitigation, and Additional Obligations

Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Mitigation Measures	Facility design, construction, and operation; Regulatory compliance for hazardous substance containment, disposal, monitoring, and reporting	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Landfill Gas/LFG Condensate							
Impact	Potential hazards due to migration and accumulation of landfill gas and condensate	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	No impact
Mitigation Measures	Landfill liner system; Leachate collection and removal system; Vadose zone monitoring systems; Groundwater monitoring system; Final cover; Gas collection system	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Same as proposed Project
Fires							
Impact	Potential for LFG, subsurface, surface, refuse, and right-of-way fires	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Proper operation/maintenance of LFG collector system; Staged response for control of subsurface fires in emergency response plan; retain large watering trucks and earth moving equipment for onsite emergency response; regular inspection/removal of vegetation posing right-of-way fire hazard	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Vectors and Disease							
Impact	Potential for landfill to be used by animals, birds, and insects for foraging and/or breeding, which may result in an increased potential for disease transport	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Mitigation Measures	Daily application of earthen cover material per state regulations; bird control barriers/measures; final closure cap; operational practices; ***enclosure of waste receiving facility in Planning Area A;*** **raven and predator monitoring and control program**	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Worker Safety							
Impact	Potential exposure to noise, dust, odors, landfill gas, bodily injury, and unsafe materials	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Compliance with state/federal occupational health and safety regulations; Use of standard safety procedures for employee handling of refuse, including use of personal protective equipment, use of enclosed cabs on heavy equipment, rotation of worker assignments, and adequate supervision of personnel	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
TRAFFIC AND TRANSPORTATION (DRAFT EIS/EIR SECTION 4.3; APPENDIX M, TABLE C)							
Impact	No significant impacts requiring mitigation identified	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Additional Obligations	***Reconstruct, repair, and maintain Eagle Mountain Road to County standards; reconstruct three MWD access roads; enforce speed limit, construct drainage at Eagle Mountain Road extension; submit plans to MWD for review; notify MWD before trains pass air strip; construct crossing signals at road crossings of railroad; raise grade of MWD access roads near railroad crossings***	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
AIR QUALITY (DRAFT EIS/EIR SECTION 4.4; APPENDIX M, TABLE D)							
Impact	Degradation of air quality due to increased emissions in both the South Coast Air Basin and the Southeast Desert Air Basin due to increased emissions from motor vehicles, including train locomotives, on-highway haul trucks, and off-highway heavy equipment	Due to continuing requirement for Southern California landfill capacity, this alternative is projected to result in emissions approximately equivalent in magnitude to those of the proposed Project; Total emissions compared to proposed Project: NOx (84%); CO (223%); PM10 (99%); VOC (214%); SO2 (74%)	This alternative is projected to result in emissions approximately equivalent in magnitude to those of the proposed Project; Total emissions compared to proposed Project: NOx (81%); CO (85%); PM10 (79%); VOC (81%); SO2 (80%)	Same as proposed Project	This alternative is projected to result in emissions approximately equivalent in magnitude to those of the proposed Project; Total emissions compared to proposed Project: NOx (79%); CO (84%); PM10 (83%); VOC (86%); SO2 (88%)	This alternative is projected to result in emissions approximately equivalent in magnitude to those of the proposed Project; Total emissions compared to proposed Project: NOx (81%); CO (85%); PM10 (79%); VOC (81%); SO2 (80%)	Same as proposed Project
Mitigation Measures	Compliance with state and federal on- and off-road vehicle emission regulations; Preferential "clean fuel" use as appropriate; Preferential low- or zero-emission vehicle and equipment purchases; **Reduction of NOx emissions to 226 tons per year;** Active dust suppression; **Evaluation of effectiveness of dust suppression program;** Selective vehicle/equipment shut-downs; BACT for LFG recovery; **landfill operator will seek emission offsets from SCAQMD for gas flare stations; MRC will install air quality, visibility and meteorology monitoring stations at locations jointly determined with JTNP; implement protocol to measure visibility impacts jointly with NPS; minimize odor impacts so not noticeable at JTNP; minimize number of municipal waste containers and control animal access**	Similar to those of the proposed Project with the exception of fleet equipment and LFG flare emission requirements	Same as proposed Project	Same as proposed Project	Same as proposed Project, without truck-related measures	Same as proposed Project	Same as proposed Project

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Significance After Mitigation	Significant remaining impact due to exceedance of emission and concentration-based thresholds.	No net emission reduction benefit attributable to proposed Project.	Significant remaining impact due to exceedance of emission and concentration-based thresholds.	Significant remaining impact due to exceedance of emission and concentration-based thresholds.	Significant remaining impact due to exceedance of emission and concentration-based thresholds.	Significant remaining impact due to exceed-ance of emission and concentration-based thresholds.	Significant remaining impact due to exceedance of emission and concentration-based thresholds.
LAND USE (DRAFT EIS/EIR SECTION 4.5; APPENDIX M, TABLE E)							
Compatibility with Existing Land Uses							
Impact	Potential impacts to existing residential and correctional facility uses	No impact	Same as proposed Project	Same as proposed Project	Noise, air quality, and traffic impacts to existing and surrounding land uses from refuse trucks along Kaiser Road would be eliminated	Same as proposed Project	Increased landfill employee commute; potential increased hazards due to building deterioration
Mitigation Measures	Restrict transfer truck traffic to desig-nated roads; maintain minimum 25-foot setback and maximum 60-foot height for all buildings; maintain berms to partially obscure views onto project site; control fugitive dust; install sound attenuating walls and landscape buffers as needed	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Compatibility with Surrounding Land Uses							
Impacts	No significant impacts requiring mitigation identified	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Consistency with Plans and Policies							
Impacts	Inconsistent with Riverside County General Plan and zoning ordinance (land use, open space, and solid waste management elements); Consistent with BLM land use plans	No impact	Same as proposed Project	Same as proposed Project except right-of-way grant for Eagle Mountain Road would not be required	Same as proposed Project	Same as proposed Project	Same as proposed Project except no zone change would be required and no Specific Plan for the Townsite would be required

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Mitigation Measures	Completion of County General Plan Amendment, Zone Change, Development Agreement, Revised Reclamation Plan, Specific Plans (landfill and existing Townsite), BLM/Kaiser land exchange; obtain permits from CDFG and USFWS	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	None required
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Additional Obligations	***Submit all plans for improvements on MWD property to MWD for review and approval at MRC/Kaiser expense.***	***None required***	***Same as proposed Project***	***Same as proposed Project***	***Same as proposed Project***	***Same as proposed Project***	***Same as proposed Project***
SURFACE WATER DRAINAGE AND FLOODING (DRAFT EIS/EIR SECTION 4.6; APPENDIX M, TABLE F)							
Major Washes and Drainages							
Impact	Potential drainage impacts (erosion, plant/animal life, flooding, debris deposition) to the East Pit, Townsite, and alluvial areas east of Project site	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Project design features, consistent with Riverside County Flood Control District stipulations, including: installation of temporary and permanent perimeter drainage control system; slope final landfill not greater than 3 percent. ***Submittal of plans for MWD review and approval prior to changes in volume, flowrate or flow direction of any runoff toward the CRA.***	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
BIOLOGICAL RESOURCES (DRAFT EIS/EIR SECTION 4.7; APPENDIX M, TABLE G)							
Desert Tortoise							
Impact	Permanent loss of individuals and habitat, potential increased raven and other predation, potential harassment of individuals (noise and vibration)	No impact; precludes high quality habitat land exchange and contributions to Environmental Mitigation Trust	Similar to proposed Project; May result in fewer tortoise mortalities; reduced contri-butions to Environmental Mitigation Trust	Reduces permanent loss of habitat (widening of Eagle Mountain Road), and impacts from truck traffic; other potential impacts similar to proposed Project	Reduces permanent loss of habitat (widening of Eagle Mountain Road), and impacts from truck traffic; other potential impacts similar to proposed Project	Similar to proposed Project; no land exchange precludes protection and management of high quality habitat; reduced contributions to Environmental Management Trust	Reduced potential for Townsite domestic animal impacts; potential for increased road kills
Mitigation Measures	Acquisition and protection of **400** acres of habitat; Environmental Mitigation Trust (EMT) contribution—**use EMT to acquire private inholdings of habitat within DWMAs to reduce fragmentation; include CDFG as full partner with NPS and BLM in approval of Chuckwalla Bench habitat mitigation;** limits on individual deaths/removals; survey and monitor prior to and during **continuous covering of waste; limit working face to 2 acres; install litter control fencing; conduct litter patrols; provide cover for area inactive for 180 days; educate Townsite residents; impose restrictions on Townsite trash disposal; prohibit outdoor feeding of Townsite domestic animals; monitor structures that could provide raven nest sites; raven and predator monitoring and control program**	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A; Continued degradation and fragmentation of habitat	Reduction in funding for land acquisitions for habitat protection	Not significant	Reduction in funding for land acquisitions for habitat protection	Significant	Similar to proposed Project

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Bighorn Sheep							
Impacts	Loss of water sources and habitat; potential indirect effects from residential Townsite population; potential disruption of sheep movement	No impact; precludes high quality habitat land exchange and contributions to Environmental Mitigation Trust	Similar to proposed Project; reduced contributions to Environmental Mitigation Trust	Reduces permanent loss of habitat (widening of Eagle Mountain Road), and impacts from truck traffic; other potential impacts similar to proposed Project	Reduces permanent loss of habitat (widening of Eagle Mountain Road), and impacts from truck traffic; other potential impacts similar to proposed Project	Similar to proposed Project; no land exchange precludes protection and management of high quality habitat; reduced contributions to Environmental Management Trust	Reduced potential for Townsite domestic animal impacts
Mitigation Measures	Purchase of high quality habitat; Environmental Mitigation Trust contribution—$1/ton; Install **four** permanent water sources, **two near Project and two along rail spur,** to encourage bighorn sheep to use surrounding natural areas; **these sites and their design to be approved by biologists at NPS, BLM and CDFG**; **MRC to fill/maintain water sources, with four-time replacement over life of Project;** rehabilitate Buzzard Springs and clear of tamarisk; preserve buffer habitat areas around landfill (644 acres); monitor sheep movement; **prohibit domestic livestock at Townsite; restrain/control domestic dogs at Townsite;** conduct employee awareness program; **notify CDFG within one day of any sheep kills by trains**	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	None required

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Significance After Mitigation	Not significant	N/A; Continued degradation and fragmentation of habitat	Not significant; Reduction in funding for land acquisitions for habitat protection	Not significant	Not significant; Reduction in funding for land acquisitions for habitat protection	Not significant; Reduction in funding for land acquisitions for habitat protection	Not significant
Mountain Lion							
Impacts	**Potential loss of 1,000 acres of habitat used by one mountain lion**	**No Impact**	**Same as proposed Project**	**Same as proposed Project**	**Same as proposed Project**	**Same as proposed Project**	**None required**
Mitigation Measures	**Although no significant impact anticipated, could consider acquisition of additional habitat through EMT**	**No Impact**	**Same as proposed Project**	**Same as proposed Project**	**Same as proposed Project**	**Same as proposed Project**	**None required**
Significance after Mitigation	**Not significant**		**Not significant**	**Same as proposed Project**	**Same as proposed Project**	**Same as proposed Project**	**None required**
Desert Pupfish							
Impacts	Potential habitat loss from rail accident or major construction on trestle over habitat; potential impacts to water quality resulting in fish kills	No impact; precludes high quality habitat land exchange and contributions to Environmental Mitigation Trust	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Mitigation Measures	Annually monitor pupfish (by CDFG); if major construction is necessary, incorporate protective measures in plans and monitor construction/maintenance activities; include biologist on emergency response team and restore any habitat disturbed by accident; locomotive fuel tank inspections prior to passage over Salt Creek; manual, nonchemical weed abatement; establish experimental population at Deep Canyon Preserve; **CDFG to determine source of individuals collected to establish experimental population;** implement employee education program; implement provisions of CDFG Streambed Alteration Agreement	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Other Sensitive Wildlife							
Impacts	Potential loss of California leaf-nosed bat roosting areas hibernacula; loss of Common Chuckwalla habitat	No impact	Same as proposed Project	Increased truck distance traveled would expose more wildlife to road kill	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	**Open Black Eagle adit to create alternative bat winter roost site; gate opening of new adit with CDFG-approved bat gate; CDFG biologist to monitor roost sites; construct new (third) adit if Black Eagle adit is not recolonized**; preconstructor survey and removal of Chuckwallas	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Potential for bat roost habitat loss after mitigation; others not significant	N/A	Potential for bat roost habitat loss after mitigation; others not significant	Potential for bat roost habitat loss after mitigation; others not significant	Potential for bat roost habitat loss after mitigation; others not significant	Potential for bat roost habitat loss after mitigation; others not significant	Potential for bat roost habitat loss after mitigation; others not significant
Sensitive Plant Species							

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Impacts	Loss of Alverson's foxtail cactus habitat	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Reduced impacts to Alverson's foxtail cactus	Same as proposed Project
Mitigation Measures	Transplant program for lost cacti on suitable areas within project boundary; **collect seeds from individuals previously transplanted during reproductive season; store seeds appropriately at UC Riverside;** monitor transplants once a month for **five years**; submit monitoring report to BLM, CDFG, and USFWS	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Impacts	**Potential loss of 600 individual California barrel cactus over life of Project**	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Reduced impacts to California barrel cactus	Same as proposed Project
Mitigation Measures	**Transplant individuals within area included in active phase(s) of Project; collect seeds from individuals to be transplanted and appropriately store at UC Riverside; monitor individuals transplanted for five years**	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Impacts	**Potential for increase in predators orocopia sage along railroad**	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Avoidance; keep roads adjacent to railroad to current width, avoid off road travel, minimize impact area	N/A	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	No impact	Not significant	Not significant	Not significant	Not significant	Not significant
Biodiversity and Ecosystem Function							
Impacts	**Although no significant impacts requiring mitigation have been identified, additional obligation identified in the NPS Agreement will be implemented**	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Measures	**MRC/Kaiser will provide funds to the National Park Foundation to support research and land acquisition; MRC/Kaiser will provide office/housing space in the Townsite to NPS; and will offer 190 acres of land to NPS**						
Significance After	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
GROWTH INDUCEMENT AND SOCIOECONOMICS (DRAFT EIS/EIR SECTION 4.8)							
Impacts	No significant impacts requiring mitigation identified	Positive socioeconomic impacts precluded	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
GEOLOGY AND MINERAL RESOURCES (DRAFT EIS/EIR SECTION 4.9; APPENDIX M, TABLE H)							
Soils and Geology							
Impacts	Potential exists for settlement within alluvial soils, for expansive soils, and for surficial instability	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Identify expansive soils in alluvial material within the landfill footprint and regrade, as necessary; determine the safe slope angles and maintain slopes within this range; identify need to flatten slopes or construct fill buttresses; excavate and/or recompact unsuitable soils prior to liner construction; place liner against safe slope angles	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Seismic Hazards							
Impacts	Potential ground shaking, fault rupture, liquefaction, slope instability, settlement	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Design containment facilities to withstand M-6.5 event located 5 miles from site; shear strength values will be specified for man-made slopes; remove loose alluvium and replace with compacted fill prior to construction facilities	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Mineral Resources							

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Impacts	No significant impact requiring mitigation identified	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
VISUAL AND RECREATION (DRAFT EIS/EIR SECTION 4.10; APPENDIX M, TABLE I)							
Visual Resources—Contrast							
Impacts	Potential for increased visual contrast with existing landscape	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Blend the topographic contours of the landfill with adjacent landforms, and minimize color and tone contrast of the final cover; use screening berms along southern and eastern edge of the active working area to obscure views.	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	Site will remain disturbed by previous mining activity	Not significant	Not significant	Not significant	Not significant	Not significant
Views from Eagle Mountain Townsite							
Impacts	The proposed Project will have a significant impact on the views from the community of Eagle Mountain; however, that impact will not be visible for several decades; visual contrast will be decreased over time	Currently, the views from the community are significantly impacted by the imposing tailing pile, the exposed slopes, and scarred areas; this high level of impact would remain	Same as proposed Project	Same as proposed Project	Incremental improvement over proposed Project	Reduction in size and scale of landfill	Same as proposed Project
Mitigation Measures	Phase project and renovate Townsite	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	A significant impact is associated with this alternative	Not significant	Not significant	Not significant	Not significant	Not significant

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Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Windblown Debris and Dust							
Impacts	Potential for windblown debris and dust	No impact	Extended period of potential impact due to extended landfill life	Same as proposed Project	Extended period of potential impact due to extended landfill life	Potentially less than proposed Project due to shorter Project life span	Same as proposed Project
Mitigation Measures	Transport refuse materials to the site and to the face of the landfill in closed containers, compacted and covered on a daily basis; water haul roads regularly; install fencing and regularly patrol for litter retrieval; develop an active storm and early warning procedure for extremely windy conditions and response plan to ensure timely and complete cleanup of accidental spills; **commitment to no windblown litter in JTNP**	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Night Lighting							
Impacts	No significant impacts requiring investigation identified	No impact	Same as proposed Project	Slightly higher than proposed Project due to truck traffic	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Limit landfill activities no later than 10 p.m.; provide low-pressure sodium safety and security lights; direct lighting downward to light only the immediate area; **replace all existing non-cutoff type lights and mercury lights with sodium cutoff-type lights; review lighting types with the NPS**	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Recreation Resources							
Impacts	No significant impacts requiring mitigation identified	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
WILDERNESS (DRAFT EIS/EIR SECTION 4.11; APPENDIX M, TABLE I)							
Wilderness Resources							

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Table 2-2
Summary of Project and Alternatives' Impacts, Mitigation, and Additional Obligations

Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Impacts	Refer to impacts and mitigation measures for components of wilderness resources (Water Quality, Public Health and Safety, Air Quality, Traffic and Transportation, Land Use, Surface Water Biological Resources, Socioeconomics, Geology and Mineral Resources, Visual and Recreation Wilderness, Utilities, Noise, Cultural Resources, Paleontology and Energy	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Refer to measures identified for wilderness resources components; **payment of 10% of EMT to National Park Foundation (Foundation); payment of advance of $75,000 from EMT to Foundation; additional grant of $100,000 to Foundation; provision of 800 ft² of office space and 1,500 ft² of living space at Townsite to NPS personnel**	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Wilderness Experience							
Impacts	Potential for subjective aesthetic impacts to certain individuals	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	**NPS measures identified above could also apply**	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Potential for remaining significant impact for certain individuals	N/A	Potential for remaining significant impact for certain individuals	Potential for remaining significant impact for certain individuals	Potential for remaining significant impact for certain individuals	Potential for remaining significant impact for certain individuals	Potential for remaining significant impact for certain individuals
UTILITIES AND SERVICES (DRAFT EIS/EIR SECTION 4.12; APPENDIX M, TABLE J)							
Water and Sewer							
Impacts	No significant impacts requiring mitigation identified	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project

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Table 2-2
Summary of Project and Alternatives' Impacts, Mitigation, and Additional Obligations

Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Fire, Police, and Emergency Medical Services							
Impacts	No significant impacts were identified for police protection; significant fire protection impacts were identified due to inadequate staffing and water system capacity and flow	No impact	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	No impact
Mitigation Measures	None required for police protection; obtain written agreement for fire protection services from the Riverside County Fire Department; submit a Fire/Life Safety and Emergency Response Plan to the Fire Department; install water mains and fire hydrants to provide the required fire flows; participate in the fire protection impact mitigation program as adopted by the Riverside County Board of Supervisors; obtain clearance from RCFD to reoccupy existing dwellings and buildings	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	None required
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Utilities							
Impacts	No significant impacts requiring mitigation identified	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Community Facilities							
Impacts	No significant impacts requiring mitigation identified	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
NOISE (DRAFT EIS/EIR SECTION 4.13; APPENDIX M, TABLE K)							
Rail Traffic on Southern Pacific Railroad							
Impact	No significant impacts requiring mitigation identified	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Rail Traffic on Eagle Mountain Railroad							
Impact	Potential to exceed noise ordinance at Townsite for Rail Yard I***; similar measures will apply to MWD Pumping Plant Village***	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Divide rail traffic between Rail Yards I and II; operations of rail yard limited to 7:00 am to 10:00 pm	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project

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Table 2-2
Summary of Project and Alternatives' Impacts, Mitigation, and Additional Obligations

Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Additional Obligation	Noise monitoring, subject to review and approval of NPS; use of new technology to reduce noise	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Vehicles							
Impact	Potential to exceed noise ordinance at select locations within Townsite	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Divert/reduce traffic along Kaiser Road to Phase I container handling yard; restrict nighttime traffic along Kaiser Road near Townsite*; **similar measures will apply to MWD Pumping Plant Village***	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Landfill Operations							
Impact	Potential to exceed noise ordinance at selected locations with Townsite	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Restrict landfill equipment operating locations during nighttime hours; close Rail Yard I during nighttime hours; reconstruct Townsite residences to meet HUD requirements; **noise monitoring program approved by NPS; adopt new technology where feasible to reduce noise.**	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
	Noise monitoring, subject to review and approval of NPS; use of new additional obligations technology to reduce noise.	Not required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	
Significance After Mitigation	Not significant	N/A	Not significant	Not significant	Not significant	Not significant	Not significant
Landfill Construction							
Impact	No significant impacts requiring mitigation identified	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
CULTURAL RESOURCES (DRAFT EIS/EIR SECTION 4.14)							
Impacts	No significant impacts requiring mitigation identified	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project

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Table 2-2
Summary of Project and Alternatives' Impacts, Mitigation, and Additional Obligations

Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
PALEONTOLOGY (DRAFT EIS/EIR SECTION 4.15; APPENDIX M, TABLE L)							
Impacts	Excavations within portions of Eagle Mountain Mine and improvements to Eagle Mountain Road at the Interstate 10 exit have the potential to impact paleontologic resources; rehabilitation and maintenance of the rail line will not impact paleo resources	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Mitigation Measures	Pre-excavation survey, excavation monitoring; fossil preparation, identification, and storage, and preparation of a report by a qualified paleontologist; this report shall be submitted to Riverside County, BLM, and San Bernardino County Museum; rehabilitation and maintenance of the rail line will not require mitigation	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Not significant	N/A	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
ENERGY CONSUMPTION AND GENERATION (DRAFT EIS/EIR SECTION 4.16)							
Impacts	No significant impacts requiring mitigation identified	No impacts	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
CUMULATIVE IMPACTS (DRAFT EIS/EIR SECTION 5.0)							
ECEC Hydroelectric Project							
Impacts	Potential for significant cumulative impacts related to: water quality and use (overdraft); air quality; land use; biological resources; growth/ socio-economics; and visual/recreation resources	No impact	Similar to, but of lesser magnitude than proposed project	Similar to, but of lesser magnitude than proposed project	Similar to, but of lesser magnitude than proposed project	Similar to, but of lesser magnitude than proposed project	Similar to, but of lesser magnitude than proposed project

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Table 2-2
Summary of Project and Alternatives' Impacts, Mitigation, and Additional Obligations

Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Mitigation Measures	Groundwater Quality—Refer to Section 4.1 mitigation measures Air Quality —Refer to Section 4.4 mitigation measures Land Use—Refer to Section 4.5 mitigation measures Biology—Refer to Section 4.7 mitigation measures Growth/socioeconomics—Refer to Section 4.8 mitigation measures	None required	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project
Significance After Mitigation	Air Quality and Groundwater Quality and Use—Cumulative impacts will not be reduced below a level of significance All Others—Not significant	N/A	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project
Joshua Tree National Park							
Impacts	Potential for significant cumulative impacts to air quality associated with increased visitor use at JTNP	No impact	Similar to, but of lesser magnitude than proposed project	Similar to, but of lesser magnitude than proposed project	Similar to, but of lesser magnitude than proposed project	Similar to, but of lesser magnitude than proposed project	Similar to, but of lesser magnitude than proposed project
Mitigation Measures	Air Quality—Refer to Section 4.4 mitigation measures	None required	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project
Significance After Mitigation	Air Quality—Cumulative impacts will not be reduced below a level of significance	N/A	Air Quality—Cumulative impacts will not be reduced below a level of significance	Air Quality—Cumulative impacts will not be reduced below a level of significance	Air Quality—Cumulative impacts will not be reduced below a level of significance	Air Quality—Cumulative impacts will not be reduced below a level of significance	Air Quality—Cumulative impacts will not be reduced below a level of significance
La Paz County Regional Landfill							
Impacts	Potential for significant cumulative impacts related to: air quality; biological resources; and traffic	Air Quality—Due to continuing requirement for Southern California landfill capacity, this alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Air Quality—This alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Same as proposed Project	Air Quality—This alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Air Quality—This alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Same as proposed Project

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Table 2-2
Summary of Project and Alternatives' Impacts, Mitigation, and Additional Obligations

Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Mitigation Measures	Air Quality—Refer to Section 4.4 mitigation measures Biology —Refer to Section 4.7 mitigation measures	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Air Quality—Cumulative impacts will not be reduced below a level of significance Biology—Not significant	Air Quality—Impacts will continue to be similar in magnitude to those of the proposed Project, resulting in a significant cumulative impact on air quality	Air Quality—Cumulative impacts will not be reduced below a level of significance Biology—Not significant	Air Quality—Cumulative impacts will not be reduced below a level of significance Biology—Not significant	Air Quality—Cumulative impacts will not be reduced below a level of significance Biology—Not significant	Air Quality—Cumulative impacts will not be reduced below a level of significance Biology—Not significant	Air Quality—Cumulative impacts will not be reduced below a level of significance Biology—Not significant
Rail Cycle - Bolo Station Landfill							
Impacts	Potential for significant cumulative impacts related to: air quality	Air Quality—Due to continuing requirement for Southern California landfill capacity, this alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Air Quality—This alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Same as proposed Project	Air Quality—This alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Air Quality—This alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Same as proposed Project
Mitigation Measures	Air Quality—Refer to Section 4.4 mitigation measures	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Air Quality—Cumulative impacts will not be reduced below a level of significance	Air Quality—Impacts will continue to be similar in magnitude to those of the proposed Project, resulting in a significant cumulative impact on air quality	Air Quality—Cumulative impacts will not be reduced below a level of significance	Air Quality—Cumulative impacts will not be reduced below a level of significance	Air Quality—Cumulative impacts will not be reduced below a level of significance	Air Quality—Cumulative impacts will not be reduced below a level of significance	Air Quality—Cumulative impacts will not be reduced below a level of significance

Note: Material in **bold** type in the body of the table is additional obligations since publication of the Draft EIS/EIR. Underlined material summarizes additional obligation adopted pursuant to the Agreement between the NPS and MRC/Kaiser (Appendix T). ***Italicized*** material in the body of the table summaries obligations adopted pursuant to the Memorandum of Understanding with the Southern California Metropolitan Water Distrit (Appendix Y).

Table 2-2
Summary of Project and Alternatives' Impacts, Mitigation, and Additional Obligations

Issues	Proposed Action	No Action	Reduced Volume of Onsite Disposal	Alternative Road Access	Rail Access Only	Landfill on Kaiser Land Only	Landfill Development/ No Townsite Development
Mesquite Regional Landfill							
Impacts	Potential for significant cumulative impacts related to: public health & safety; traffic/transportation; air quality; and biological resources	Air Quality—Due to continuing requirement for Southern California landfill capacity, this alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Air Quality—This alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Same as proposed Project	Air Quality—This alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Air Quality—This alternative is projected to result in cumulative impacts approximately equivalent in magnitude to those of the proposed Project	Same as proposed Project
Mitigation Measures	Public Health & Safety—Refer to Section 4.2 mitigation measures Traffic & Transportation—Refer to Section 4.3 mitigation measures Air Quality—Refer to Section 4.4 mitigation measures Biology —Refer to Section 4.7 mitigation measures	None required	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project	Same as proposed Project
Significance After Mitigation	Air Quality—Cumulative impacts will not be reduced below a level of significance All Others—Not significant	Air Quality—Impacts will continue to be similar in magnitude to those of the proposed Project, resulting in a significant cumulative impact on air quality	Air Quality—Cumulative impacts will not be reduced below a level of significance All Others—Not significant	Air Quality—Cumulative impacts will not be reduced below a level of significance All Others—Not significant	Air Quality—Cumulative impacts will not be reduced below a level of significance All Others—Not significant	Air Quality—Cumulative impacts will not be reduced below a level of significance All Others—Not significant	Air Quality—Cumulative impacts will not be reduced below a level of significance All Others—Not significant

Note: Material in **bold** type in the body of the table is additional obligations since publication of the Draft EIS/EIR. Underlined material summarizes additional obligation adopted pursuant to the Agreement between the NPS and MRC/Kaiser (Appendix T). ***Italicized*** material in the body of the table summaries obligations adopted pursuant to the Memorandum of Understanding with the Southern California Metropolitan Water Distrit (Appendix Y).

3.0 Affected Environment

A detailed description of the affected environment is found in the Draft EIS/EIR, on pages 3.1-1 through 3.16-2 and Appendices C, D, E, F, G, H, I, J, K, and L. Since preparation of the Draft EIS/EIR, minor changes in the description of the affected environment, resulting from public and agency comments, have been incorporated into the Final EIS/EIR. These changes, which are summarized in Section 6 of the Final EIS/EIR, do not change the analyses or conclusions of the Draft EIS/EIR. See Appendix O of this document for a list of locations where the Draft EIS/EIR is available for review.

4.0 Environmental Consequences

A detailed description of the environmental consequences is found in the Draft EIS/EIR on pages 4.1-1 through 4.16-9 and Appendices C, D, E, F, G, H, I, and J. Since preparation of the Draft EIS/EIR, minor changes in the description of the environmental consequences, resulting from public and agency comments, have been incorporated into the Final EIS/EIR. These changes, which are summarized in Section 6 of the Final EIS/EIR, do not change the analyses or conclusions of the Draft EIS/EIR. See Appendix O of this document for a list of locations where the Draft EIS/EIR is available for review.

5.0 Consultation and Coordination

5.1 Scoping

In accordance with CEQA, a NOP was delivered on May 6, 1995, to the California Office of Planning and Research (OPR) and the State Clearinghouse for distribution to state agencies. The NOP also was circulated to agencies, cities, government officials, interested groups, and interested members of the public to initiate the public scoping process. In compliance with NEPA regulations (Title 40, CFR 1508.22), the BLM prepared and circulated a Notice of Intent (NOI) to agencies, cities, government officials, interested groups, and interested members of the public. The NOI was published in the *Federal Register* on May 12, 1995. On June 6, 1995, the BLM submitted a correction notice clarifying the case number for publication in the *Federal Register.* The NOP, the NOI, and a list of parties receiving these documents are in Appendix A of the Draft EIS/EIR. Appendix A also contains a summary of scoping comments and a page referencing where each issue is addressed in the EIS/EIR.

Four public scoping meetings were held in the County of Riverside over a 2-day period to solicit public and agency comments for consideration in the EIS/EIR: scoping meetings were held in Palm Desert and Desert Center on May 31, 1995, and in Riverside and Hemet on June 1, 1995. In addition to the public scoping meetings, a series of individual agency scoping meetings were held from February through August 1995. Participating state agencies were the California Integrated Waste Management Board (CIWMB), Regional Water Quality Control Board (RWQCB), State Water Resources Control Board (SWRCB), California Department of Fish and Game (CDFG), South Coast Air Quality Management District (SCAQMD), and the California Air Resources Board. The federal agencies were the NPS, the Biological Resources Division of the U.S. Geological Survey (formerly the National Biological Service), the Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (USFWS), and the BLM. Local agencies included several departments of the County of Riverside. Separate scoping meetings were also held with litigants in two of the three legal challenges to the previous EIR (i.e., the Eagle Crest Energy Corporation and Lawrence and Donna Charpied.) Members of the third litigant group (the National Parks Conservation Association and others) either sent written comments, commented in scoping sessions, declined to meet, or did not respond to requests to meet.

Approximately 500 agencies, organizations, and individuals were sent copies of the NOP and/or the NOI prepared by the BLM and the County, respectively. Parties receiving the NOP/NOI were notified of the four scheduled public scoping meetings and invited to attend the meetings. The NOP and the NOI requested recipients to submit written comments on the Project and identify issues of concern to be addressed in the EIS/EIR. Appendix A in the Draft EIS/EIR includes copies of the NOP and NOI; a list of all agencies, organizations, individuals to whom the NOP and/or the NOI were sent; and a summary of issues raised during the scoping process.

5.2 Public Review

The Draft EIS/EIR was filed with the EPA on July 1, 1996. The Notice of Availability of the Draft EIS/EIR was published in the *Federal Register* on July 12, 1996. The County of Riverside submitted the Notice of Completion for the EIR for filing with the State of California Clearinghouse on July 2, 1996, initiating the CEQA public review period, which began on July 12, 1996. An extended public review period was provided to respond to requests for additional review time from several individuals and environmental organizations. The comment period closed September 17, 1996, providing a 67-day review period. Copies of notifications and miscellaneous correspondence are included in Appendix O of this volume. A list of those who received the Final EIS/EIR is also included in Appendix O.

5.3 Public Hearings

The BLM conducted four public hearings to obtain input into the EIS/EIR on the following dates and locations:

- August 5, 1996 Lake Tamarisk Clubhouse, Desert Center, CA
- August 6, 1996 Palm Springs Convention Center, Palm Springs, CA
- August 7, 1996 Blackrock Visitor Center, JTNP, Yucca Valley, CA
- August 8, 1996 Riverside Municipal Auditorium, Riverside, CA

The hearings were conducted by a BLM Hearings Officer. Transcripts of these hearings are contained in Volume II of this Final EIS/EIR. The comments provided at these hearings are included in Volume II as Comment Numbers 15, 16, 17, and 18.

The County of Riverside Planning Commission has tentatively scheduled three additional EIS/EIR public hearings on January 30, January 31, and February 5, 1997. The purpose of these hearings is for the Planning Commission to consider Project entitlements and to make recommendations to the Board of Supervisors on the certification of the EIR/EIS, in accordance with CEQA requirements, and the issuance of land use permits for the landfill and Townsite. If the components of the Project subject to County review are approved, a Statement of Overriding Considerations must be adopted by the County because the Final EIS/EIR identifies adverse impacts that cannot be reduced to below the level of significance.

5.4 List of Agencies, Organizations, and Persons to Whom Copies of the Final EIS/EIR Were Sent

Ten copies of the Final EIS/EIR were sent to the Office of Planing and Research (OPR) to distribution to California state agencies. Copies of the Final EIS/EIR were also sent to the EPA headquarters in Washington, D.C.; the NPS; regulatory agencies with permitting responsibilities for the Project; and those who submitted substantive comments on the Draft EIS/EIR. A complete list of the agencies, organizations, and individuals that received the

Final EIS/EIR is in Appendix 0. Copies of the Final EIS/EIR were also sent to the following libraries and public places where the Draft EIS/EIR was made available:

University of California, Riverside Library
Government Publications
P.O. Box 900
Riverside, CA 92517

Riverside Central Library
Government Documents Section
381 Seventh Street
Riverside, CA 92501

California State Library
Government Publications
P.O. Box 942837
Sacramento, CA 94237

Palo Verde Valley District Library
125 West Chanslor Way
Blythe, CA 92225

Los Angeles Public Library
Documents Department
433 Spring Street
Los Angeles, CA 90013

Indio Branch Library
200 Civic Center Mall
Indio, CA 92201

Palm Desert Public Library
4480 Portola
Palm Desert, CA 92260

Coachella Public Library
1538 7th Street
Coachella, CA 92236

Riverside Community College
Martin Luther King Library
4800 Magnolia Avenue
Riverside, CA

Cathedral City Public Library
33520 Date Palm Drive
Cathedral City, CA

San Bernardino Public Library
Feldheym Central Library
San Bernardino, CA 92410

Lake Tamarisk Branch Public Library
43880 Lake Tamarisk Drive
Desert Center, CA

Palm Springs Library Center
300 South Sunrise Way
Palm Springs, CA 92262

San Bernardino County Library
Joshua Tree Branch
6465 Park Boulevard
Joshua Tree, CA 92252

College of the Desert Library
43-500 Monterey Avenue
Palm Desert, CA 92260

Desert Hot Springs Public Library
11691 West Drive
Desert Hot Springs, CA 92240

San Bernardino County Library
Yucca Valley Branch
57098 Twenty-nine Palms Highway
Yucca Valley, CA 92284

Rancho Mirage Public Library
42520 Bob Hope Drive
Rancho Mirage, CA

San Francisco Public Library
100 Larkin Street
San Francisco, CA 94102

Imperial County Library
1647 W. Main Street
El Centro, CA 92243

U.S. Geological Survey Library
345 Middlefield Rd., MS 955
Menlo Park, CA 94025

Corona Public Library
650 South Main Street
Corona, CA 91720

Copies of the Final EIS/EIR are also available for inspection at the following County and BLM offices:

County of Riverside, Planning Department
4080 Lemon Avenue, 9th Floor
Riverside, CA 92501

County of Riverside, Planning Department
46-209 Oasis St., 2nd Floor, Room 209
Indio, CA 92201

Bureau of Land Management
California Desert District
6221 Box Springs Road
Riverside, CA 92507

Bureau of Land Management
California State Office
2800 Cottage Way, Room E-2841
Sacramento, CA 95825

Bureau of Land Management
Palm Springs--South Coast Resource Area
63-500 Garnet Avenue
North Palm Springs, CA 92258-2000

Bureau of Land Management Service Center Library
Denver Federal Center, Building 50
Denver, CO 80225

In addition to distributing the Draft EIS/EIR to County and BLM offices and to libraries in the Southern California and San Francisco area, the Report of Waste Discharge (GeoSyntec, 1992), and the associated Supplemental Volumes 1 and 2 (GeoSyntec 1993a, 1993b) were previously distributed to the following locations:

- BLM—Riverside office
- BLM—Palm Springs office
- Lake Tamarisk Library—Desert Center
- Palm Desert Library—Palm Desert
- Palm Springs Library—Palm Springs
- Indio Library—Indio
- County of Riverside Planning Department—Riverside
- County of Riverside Planning Department—Indio

5.5 Section 7 Consultation

The USFWS is responsible for oversight of the federal Endangered Species Act (ESA). As required by Section 7 of the ESA, the BLM consulted with the USFWS on potential impacts to the desert tortoise (a federally listed threatened species) and the desert pupfish (a federally listed endangered species). In September 1992, the USFWS issued a "no jeopardy" biological opinion, together with a number of required conditions and mitigation measures. On August 30, 1993, the USFWS formally promulgated proposed critical habitat areas for the desert tortoise. In response, on September 1, 1993, the BLM again formally initiated consultation with the USFWS about the effect of the landfill on threatened and endangered species. Upon review, the USFWS again confirmed its "no jeopardy" opinion. After additional biological surveys were carried out in April and May, 1996, the BLM asked the USFWS to review the new information. In a memorandum dated September 30, 1996, the USFWS stated that "new survey information of desert tortoise in new areas in the project vicinity and the recent designation of critical habitat shall be investigated, but at present the Service sees no need to reinitiate consultation pursuant to section 7 of the Act" (see correspondence in Appendix O of the Final EIS/EIR).

On December 12, 1996, the office of Historic Preservation, Department of Parks and Recreation concurred with the determination that neither the Eagle Mountain Mine nor the Townsite are eligible for inclusion in the National Register of Historic Places. (See correspondence in Appendix O).

6.0 Modifications/Updates to the Draft EIS/EIR

6.0 Modifications and Updates to the Draft EIS/EIR

The following subsections identify changes to the text, tables, and figures in the Draft EIS/EIR made as a result of comments on the Draft EIS/EIR. Other suggested changes to the document (generally editorial) are identified in the responses to comments on the Draft EIS/EIR (Volume II of the Final EIS/EIR); these changes are acknowledged but are not repeated here. There were no substantive changes to Sections 5 through 10 of the Draft EIS/EIR. Changes to appendices are described in the relevant sections below (e.g., changes to Appendix E, Air Quality, are described in conjunction with the revisions to the air quality analysis in Draft EIS/EIR Sections 3.4 and 4.4). Text that replaces or supplements text in the Draft EIS/EIR is indicated in **bold** in this section.

6.1 Map of Project Features and BLM Areas of Critical Environmental Concern (ACECs)

Several commenters stated that the figures in the Draft EIS/EIR did not clearly portray the relationship between the location of key Project features and BLM Areas of Critical Environmental Concern (ACECs). In response to these comments, a new Figure (6-1) has been added.

6.2 Public Health and Safety (Sections 3.2 and 4.2 of the Draft EIS/EIR)

The Draft EIS/EIR, Section 3.2, Public Health and Safety, discusses the state and federal field visits and surveys that have been conducted to investigate previous disposal of hazardous substances or hazardous waste in the vicinity of the proposed landfill site. The various investigations (see Section 3.2.2.1 [Bureau of Land Management's Level I Contaminant Survey], Section 3.2.2.2 [DTSC Complaint Inspection and Sampling Report], and Section 3.2.2.3 [EPA preliminary assessment], Section 3.2.2.4 [UST Removal from Eagle Mountain Mine Site, and Section 3.2.2.5 [Summary of Eagle Mountain Mine Investigations]) conclude that the existing mine site does not pose a public health or environmental hazard resulting from previous disposal practices. The five BLM surveys are in Appendix P of the Final EIS/EIR. The additional information presented below is added to the summary of the hazardous material/waste inspections in Section 3.2.2 of the Draft EIS/EIR:

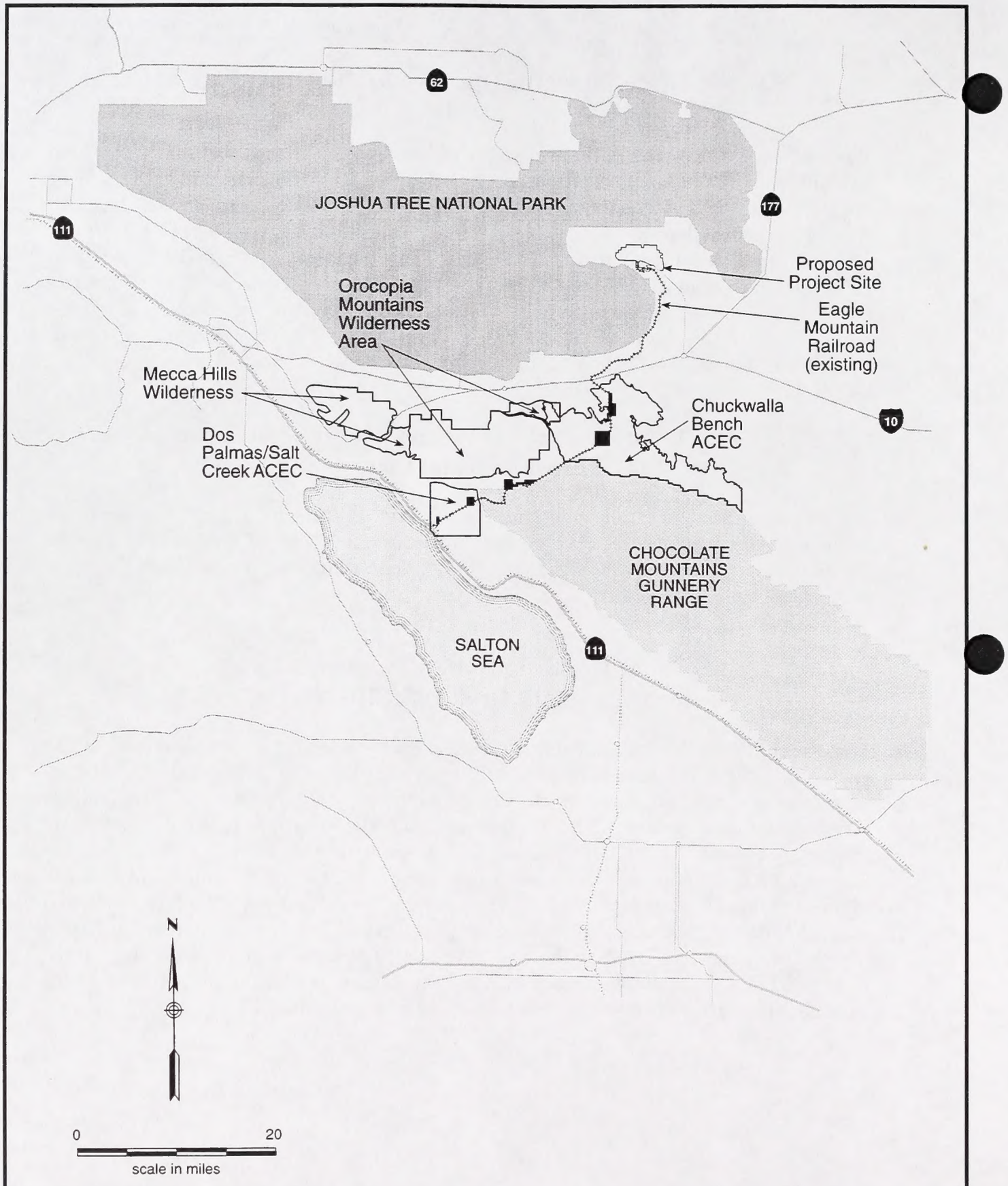


Figure 6-1
Relationship of Project Features and BLM ACECs
Eagle Mountain Landfill and Recycling Center EIS/EIR

CH2MHILL

m115231.T8.ZZ ACECs 12/96

In addition to the five BLM Level I surveys conducted in 1992 and 1996, the DTSC investigation, and the U.S. EPA Preliminary Assessment, the project applicant (MRC) retained an independent consultant to perform a Phase I Site Assessment. The report, *Results of Phase I Environmental Site Assessment, Eagle Mountain Project, Desert Area of Riverside County, California* (Earth Systems Consultants Southern California, May 1996), concludes that the investigation "revealed no significant evidence of environmental concern..." and that the site does not represent a public health or environmental hazard. This voluminous report has not been included in the Appendices of the Final EIS/EIR because of its size, but is available for inspection at the offices of the County of Riverside and the BLM, at the addresses indicated in Section 5.4 of the Final EIS/EIR.

Appendix Q of the Final EIS/EIR consists of correspondence with the California Department of Food and Agriculture, the University of California, the County of Riverside Agricultural Commissioner regarding medflies and other quarantinable pests. This information, which was omitted from the Draft EIS/EIR inadvertently, does not change the analyses or conclusions of the Draft EIS/EIR.

6.3 Traffic and Transportation (Sections 3.3 and 4.3 of the Draft EIS/EIR)

Section 3.3.1.2 (Existing at-Grade Crossing Delays), Section 3.3.1.3 (Rail Line Existing Conditions Relative Hazard Index), and Appendix D (Traffic Impact Analysis) are revised to indicate that the Avenue 54 rail crossing in the City of Coachella is currently not grade-separated. The hazard index for the Avenue 54 crossing was calculated based on traffic count information provided by the City of Coachella Public Works Department (Table 6-1).

Table 6-1
Traffic Hazard Index Avenue 54, Coachella

Year	Without Project	With Project
1996	5,267	N/A
2000	6,331	6,632
2005	12,528	13,423
2010	13,611	14,907

In 1996, the Avenue 54 crossing ranks 14th in the Eagle Mountain to Ferrum Junction segment (segment 1). In 2000, 2005, and 2010, for both the with- and without-Project cases, the Avenue 54 crossing would also rank 14th.

The City of Coachella has proposed (and the California Public Utilities Commission [PUC] has approved) a grade separation at Avenue 50 (personal communication, Andy Linehan/CH2M HILL with John Curtis, City of Coachella Public Works Director, December 16, 1996). This overpass, which will be constructed by 1998, will close the at-grade crossings at 5th Street and Avenue 50. This grade separation will reduce traffic delays and hazards at at-grade crossings in Coachella.

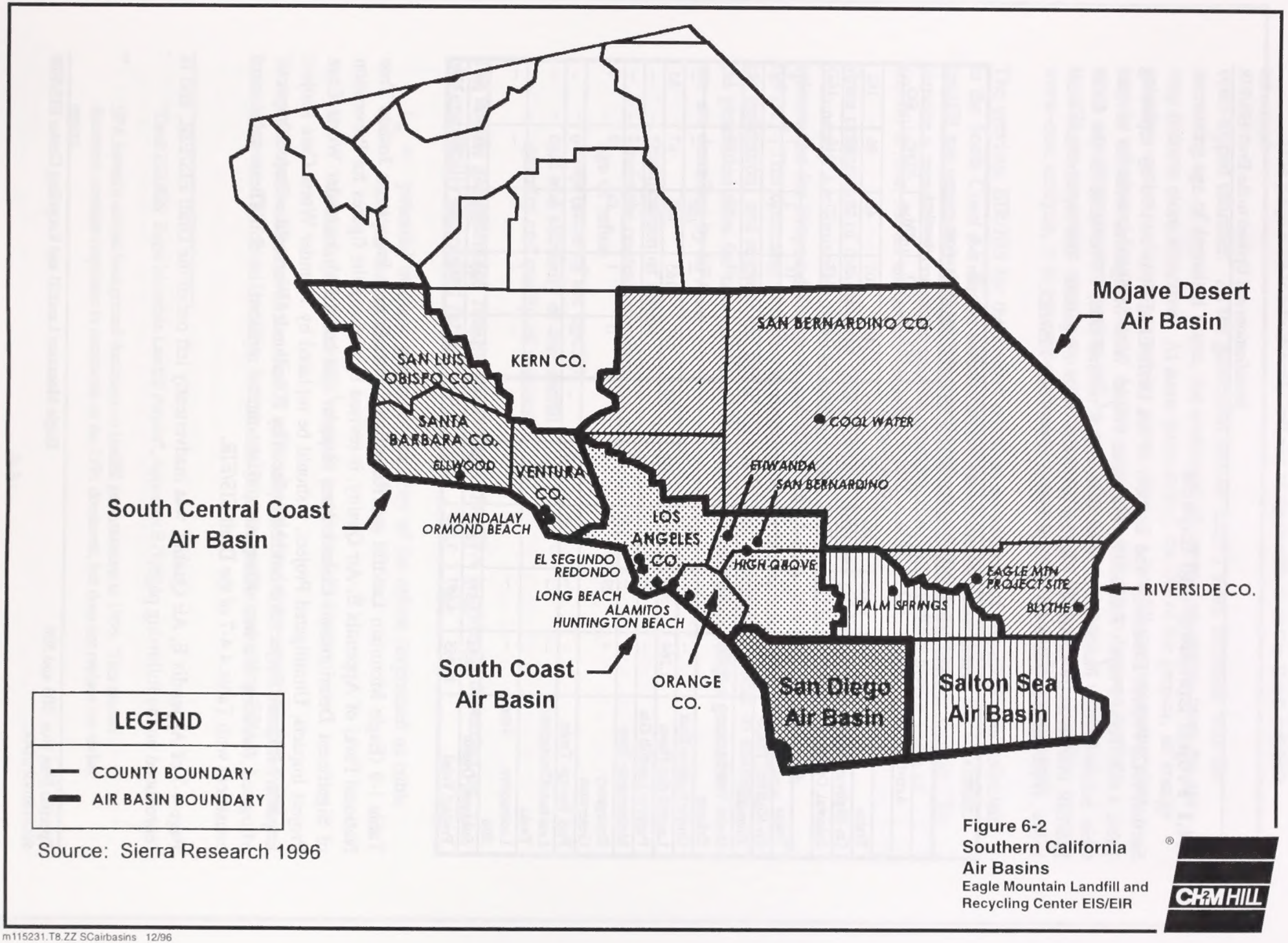
6.4 Air Quality (Sections 3.4 and 4.4 of Draft EIS/EIR)

Section 3.4.3, Existing Air Quality and Trends, is revised by adding Figure 6-2, Southern California Air Basins which shows the newly-designated Air Basin boundaries. In addition, it is revised by replacing Table 3.4-2 Fine Particulate (PM_{10}) Levels in Southeast Desert Air Basin 1984-1994, with the following revised table, which provides corrected numbers for the row labeled "Annual Geometric Mean." These revisions do not result in a change in impacts or a change in significance levels.

Revised Draft EIS/EIR Table 3.4-2 (Table 6-2)
Fine Particulate (PM_{10}) Levels in Southeast Desert Air Basin
1984-1994
(micrograms per cubic meter [$\mu g/m^3$])

Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Highest 24-Hour Average	65	496	230	171	368	712	520	780	242	175	258
2nd-highest 24-Hour Average	60	358	191	163	192	676	462	534	175	166	182
Onsite Highest 24-Hour Average							210.4[1]				--
Annual Geometric Mean* (State Standard = 30 $\mu g/m^3$)	**37.3**	**59.9**	**59.3**	**65.2**	**58.6**	**66.4**	**64.9**	**59.8**	**43.7**	**47.2**	**45.3**
Onsite Annual Geometric Mean*							21.7[2]				--
Annual Arithmetic Mean* (Federal Standard = 50 $\mu g/m^3$)	39.5	70.9	64.1	75.8	66.2	90.3	79.3	63.1	47.3	52.4	48.7
Onsite Annual Arithmetic Mean*							29.8[2]				--
Number of Days Exceeding State Std (50 $\mu g/m^3$, 24-hr)	6	57	54	56	56	63	64	58	43	47	65
Federal Std (150 $\mu g/m^3$, 24-hr)	0	6	2	3	2	9	7	7	2	3	4

Source: California Air Quality Data, Annual Summary, California Air Resources Board*. No basinwide summary available. The annual mean for each year is based on the station with the highest annual mean in the basin.[1] Highest 24-hour PM_{10} concentration measured at Eagle Mountain between March 1990 and April 1991. [2]Annual average PM_{10} concentration measured at Eagle Mountain between March 1990 and April 1991.



Source: Sierra Research 1996

Figure 6-2
Southern California
Air Basins
Eagle Mountain Landfill and
Recycling Center EIS/EIR

CH2M HILL

6.4.1 Project Emissions and Impacts

Section 4.42, Project Emissions and Impacts of the Draft EIS/EIR is revised by replacing Table 4.4-3, Total Project Emissions, Proposed Project With Mitigation, with the revised table below (which includes corrected data and a revised title). The table in the Draft EIS/EIR inadvertently contained data on emissions with mitigation. The replacement table below, is the same as Table 4-1 in Appendix E of the Draft EIS/EIR.

Replacement Table for Draft EIS/EIR Table 4.4-3 (Table 6-3)
Total Project Emissions, Proposed Project Without Mitigation

	(lb/day)					(tons/yr)				
Activity	**NO_x**	**CO**	**PM_{10}**	**VOC**	**SO_2**	**NO_x**	**CO**	**PM_{10}**	**VOC**	**SO_2**
Offsite Sources										
Trains	11,761	1,673	264	527	889	2,146	305	48	96	162
On-Highway Trucks	940	451	127	94	26	172	82	23	17	5
Subtotal, Offsite	12,701	2,124	391	621	915	2,318	387	71	113	167
Onsite Sources										
Trains	220	90	7	39	24	40	16	1	7	4
On-Highway Trucks	48	7	3	6	1	9	1	1	1	0
Townsite	98	1,022	8	83	8	18	187	2	15	1
Onsite Vehicle Exhaust	3,020	521	173	156	95	551	95	32	29	17
Onsite Fugitive Dust	--	--	560	--	--	--	--	102	--	--
Landfill Gas Flares	1,264	903	803	368	468	231	165	147	67	85
Fugitive Landfill Gas	--	--	--	311	--	--	--	--	57	--
Maintenance Shop	--	--	0	12	--	--	--	0	2	--
Emergency Generators	4	29	0	0	0	0	1	0	0	0
Fuel Storage Tanks	--	--	--	2	--	--	--	--	0	--
Leachate/Condensate Tanks	--	--	--	0	--	--	--	--	0	--
Locomotive Sand Silo	--	--	0	--	--	--	--	0	--	--
Subtotal, Onsite	**4,654**	**2,573**	**1,554**	**978**	**595**	**849**	**465**	**284**	**178**	**109**
Project Total	**17,355**	**4,697**	**1,945**	**1,599**	**1,510**	**3,167**	**852**	**355**	**292**	**276**

Table 1-9 (Eagle Mountain Landfill and Recycling Center Project Impacts on Joshua Tree National Park) of Appendix E, Air Quality, is revised by revising the figures for Prevention of Significant Deterioration--Class 1 Area (8 $\mu g/m^3$ [24-hour] PM_{10}): under Worst Case Project Impacts, Unmitigated Project, 9 should be replaced by **7**; under Worst Case Project Impacts, Mitigated Project, 8 should be replaced by **7**; and under Worst Case Project Impacts, Mitigated Reduced Volume Alternative, 6 should be replaced by **5**. These values are consistent with Table 4.4-7 of the Draft EIS/EIR.

Page 4-7 of Appendix E, Air Quality, was inadvertently left out of the Draft EIS/EIR, and is reproduced on the following page.

open-topped chamber. As the generation rate of landfill gases increases with the increasing age of deposited waste, the economics of recovering energy from the gas may become more attractive. At some point during the life of the project, an energy recovery system such as a gas turbine power plant or a landfill gas processing plant may be substituted for the flares. At this point, it is difficult to forecast the date when an energy recovery system will be used, due to uncertainties in estimating landfill gas generation rates in an arid climate such as the Project Site. For this worst-case analysis, it is assumed that only flares are used for landfill gas disposal.

The previous EIR/EIS for the Project relied on an analysis of empirical data collected in the South Coast Air Basin, which resulted in a range of estimates of the maximum landfill gas generation rates of between 18,000 and 46,000 cubic feet per minute. To provide a measure of conservatism, the previous EIR/EIS used the higher value of 46,000 ft^3/min for all air quality analyses.*

Since preparation of the previous draft EIR/EIS, EPA has published a guidance document ("Air Emissions from Municipal Solid Waste Landfills - Background Information for Proposed Standards and Guidelines," EPA-450/3-90-011a, March 1991).** This document discusses in more detail the factors associated with landfill gas generation, and suggests the use of algorithms and a computer model to estimate gas generation rates for new landfills. The factors affecting landfill gas generation rate are described by EPA as:

- composition of refuse
- moisture content of refuse
- age of refuse
- temperature of the landfill
- pH and alkalinity of the landfill
- quantity and quality of nutrients

The landfill gas generation rate model developed for EPA is critically dependent on two empirically determined factors:

L_o = potential methane generation capacity of the refuse (expressed as cubic feet per megagram of waste, or ft^3/Mg)

k = methane generation rate constant (expressed as 1/year)

To test the reasonableness of the 46,000 scfm value derived from empirical data taken from Southern California landfills, further analysis was performed using EPA's

---

* "Draft EIR/EIS: Eagle Mountain Landfill Project", Appendix E (1991).

** EPA issued a second background document on landfill gas emissions in 1995. This second document contains responses to comments on the 1991 document, but does not replace the earlier report.

The last two sentences on page 6-25 of Appendix E currently read: "Project impacts are below the EPA Class I increments for NO_X and SO_2 as well as the annual PM_{10} increment. Unmitigated Project impacts exceed the 24-hour average PM_{10} EPA Class increment; mitigated Project impacts do not exceed any Class I increment." These sentences are revised to read: **"Project impacts are below the EPA Class I increments for NO_X and SO_2 as well as the 24-hour and annual PM_{10} increment. Mitigated Project impacts also do not exceed any Class I increment."**

6.5 Biological Resources (Sections 3.7 and 4.7.8 of the Draft EIS/EIR)

6.5.1 Special Status Plant Species

On February 28, 1996, *Federal Register* Notice 7596 eliminated Category 1, 2, and 3 Candidates for identifying special status species. The conservation status of "Category" species was reviewed by the USFWS, and species were reclassified as either "Candidate" or subsequently as "Species of Concern." Table 3.7-1 of the Draft EIS/EIR has been revised to reflect this change in status (**bold** indicates revised information). In addition, to information gained during biological surveys conducted in April and May, 1996, which was reported in Appendix G of the Draft EIS/EIR, is summarized here.

"Special-Status Plant Species Observed in the Project Area" (page 3.7-8 of the Draft EIS/EIR) is replaced with the following section, which updates the status and occurrence of sensitive plants in the Project area.

> **Special-Status Plant Species Observed in the Project Area. Of the eleven species identified as potentially occurring in the Project area, the following were observed during surveys:**
>
> - ***Alverson's Foxtail Cactus:*** **A federal species of concern and a CNPS 1B species that occurs in sandy or rocky areas of creosote bush scrub at elevations between 245 and 1,970 feet (Hickman, 1993). The species was observed at the Project site, along the access roads and along the rail line during the 1995 surveys conducted in support of this EIS/EIR and 1989 surveys conducted by RECON in support of the previous EIS/EIR. The species has no protective status, but is included here because of its value as food for desert bighorn sheep.**
> - ***California Barrel Cactus:*** **A California barrel cactus that occurs in gravelly or rocky places in the California desert below the 1,970-foot elevation. The previous EIS/EIR identified more than 800 individuals within the landfill's footprint. Additional plants were observed during field surveys conducted for this EIS/EIR near access roads and along the**

rail line. The species has no protective status, but is included here because of its value as food for desert bighorn sheep.

- ***Orocopia Sage:*** **A federal species of concern and a CNPS List 1B species that occurs in creosote bush scrub, in desert dry wash woodland, and on alluvial fans below the 590-foot elevation. The species has been observed from the Orocopia Mountains to the Chocolate Mountains in Riverside County (Munz, 1974) and from Imperial and Riverside Counties (Skinner and Pavlik, 1994). Populations along the rail line were verified by surveys conducted in 1989 (BLM and County of Riverside, 1992).**

Revised Draft EIS/EIR Table 3.7-1 (Table 6-4)
Special-Status Plant Species Occurring or Potentially Occurring in the Proposed Project Area and Region

(Page 1 of 3)

Common Name *Scientific Name*	Federal Status[a]	State Status[a]	CNPS Status[b]	Probability of Occurrence[c]		
				Project Site	Access Roads	Rail Line
Utah Vine Milkweed *Cynanchum utahense*	--	--	List 4	Low	Low	Low
Spearleaf *Matelea parvifolia*	--	--	List 2	Low	Absent	Absent
Mesquite Neststraw *Stylocine sonorensis*	--	--	List 2	Low	Low	Low
Mecca-aster *Xylorhiza cognata*	FSC	--	List 1B	Absent	Absent	Absent
Orcutt's Aster *Xylorhiza orcuttii*	FSC	--	List 1B	Absent	Absent	Absent
Ribbed Cryptantha *Cryptantha costata*	--	--	List 4	Low	Low	Low
Winged Cryptantha *Cryptantha holoptera*	--	--	List 4	Moderate	Moderate	Moderate
Foxtail Cactus *Escobaria vivipara var. alversonii*	FSC	--	List 1B	Occurs	Occurs	Occurs
California Barrel Cactus *Ferocactus acanthodes* var. *acanthodes*	---	--	--	Occurs	Occurs	Occurs
Munz's Cholla *Opuntia munzii*	FSC	--	List 1B	Absent	Absent	Low
California Ditaxis *Ditaxis californica*	FSC	--	List 1B	Moderate	Occurs	High
Salton Milkvetch *Astragalus crotalariae*	--	--	List 4	Absent	Absent	Moderate
Sand-flat Locoweed *Astragalus insularis* var. *harwoodii*	--	--	List 2	Absent	Low	Low
Borrego Milkvetch *Astragalus lentiginosus* var. *borreganus*	--	--	List 4	Absent	Moderate (KR)	Moderate
Cove's Senna *Senna covesii*	--	--	List 2	Low	Absent	Low
Orocopia Sage *Salvia greatae*	FSC	--	List 1B	Absent	Absent	Occurs
Desert Unicorn Plant *Proboscidea althaeifolia*	--	--	List 4	Moderate	Moderate	Occurs

Revised Draft EIS/EIR Table 3.7-1 (Table 6-4)
Special-Status Plant Species Occurring or Potentially Occurring in the Proposed Project Area and Region

(Page 2 of 3)

Common Name *Scientific Name*	Federal Status[a]	State Status[a]	CNPS Status[b]	Probability of Occurrence[c]		
				Project Site	Access Roads	Rail Line
Santa Ana Woolly-star *Eriastrum densifolium* ssp. *sanctorum*	FE	SE	List 1B	Absent	Absent	Absent
Slender-Horned Spineflower *Dodecahema [Centrostegia] leptoceras*	FE	SE	List 1B	Absent	Absent	Absent
Thurber's Pilostyles *Pilostyles thurberi*	--	--	List 4	Low	Low	Moderate
Las Animas Colubrina *Colubrina californica*	**FSC**	--	List 4	Moderate	**Occurs**	**Occurs**
Crucifixion Thorn *Castela emoryi*	--	--	List 2	Moderate	Occurs KR	Occurs
Parish's Desert-thorn *Lycium parishii*	--	--	List 2	Low	Low	Low

a: State and federal status definitions

Federal

FE Listed endangered by the U.S. Fish and Wildlife Service
FT Listed threatened by the U.S. Fish and Wildlife Service
FPE Species that have either been proposed by the U.S. Fish and Wildlife Service or petitioned by the public for federal listing as an Endangered Species
FPT Species that have either been proposed by the U.S. Fish and Wildlife Service or petitioned for federal listing as a Threatened Species
FSC **Species that need further biological research and field study to resolve their conservation status**

Per Federal Register Notice 7596, February 28, 1996 Category 1, 2 or 3 candidates have been reclassified as "candidate" species or species of concern by the U.S. Fish and Wildlife Service. Species designated FSC in this table have been reclassified according to this Federal Register Notice. FSC are those species that need further biological research and field study to resolve their conservation status.

State

SE Listed endangered by Fish and Game Commission
ST Listed threatened by Fish and Game Commission

b: California Native Plant Society status definitions

List 1B Plants rare, threatened, or endangered in California and elsewhere
List 2 Plants rare, threatened, or endangered in California but more common elsewhere
List 3 Plants about which more information is needed; a review list
List 4 Plants of limited distribution; a watch list

Revised Drat EIS/EIR Table 3.7-1 (Table 6-4)
Special-Status Plant Species Occurring or Potentially Occurring in the Proposed Project Area and Region

(Page 3 of 3)

Common Name *Scientific Name*	Federal Status[a]	State Status[a]	CNPS Status[b]	Probability of Occurrence[c]		
				Project Site	Access Roads	Rail Line

c: Probability of occurrence definitions

Occurs	Observed during 1989, 1990, 1995, or **1996** field surveys.
High	Species commonly reported in area; observed in adjacent regions; occurs in same habitat type as found onsite
Moderate	Habitat onsite is type used by the species, but Project site is peripheral to or out of its functional range; or the species was not detected during surveys, but may have been missed due to an inconspicuous appearance, or may germinate when specific conditions are met; the species would be expected onsite or in the vicinity at least every several years.
Low	The species is rarely reported from the area, or only historically, and the habitat type is occasionally but not primarily that in which the species is found; species may either occur in limited areas of suitable habitat, or was not detected during surveys of the area and would likely have been detected if present.
Absent	Habitat required by the species is absent; or, if there is suitable habitat, the Project site is sufficiently isolated from known populations that there is no, or very little, likelihood that the species would occur in the area; or surveys did not detect the species and were complete enough to ensure that if the species was present it would have been detected.
Unknown	Insufficient information was found to determine if the species occurs within the Project area at this time.
KR	Kaiser Road

Elevations at the Project site and access roads are generally higher than those at which the species typically occurs; thus the species is not expected to occur at these locations (Figures 3.7-1 and 3.7-2).

In addition, Las Animas California and California Ditaxis, both federal species of concern, were observed along Eagle Mountain Road during the 1996 biological survey (see revised Figure 6-4 (Revised Draft EIS/EIR Figure 3.7-2). These species of concern do not require additional mitigation.

Figure 3.7-2 of the Draft EIS/EIR (Project Area Plant Communities) is replaced with the following revised Figure 3.7-2, which updates the status and occurrence of sensitive plants in the Project area.

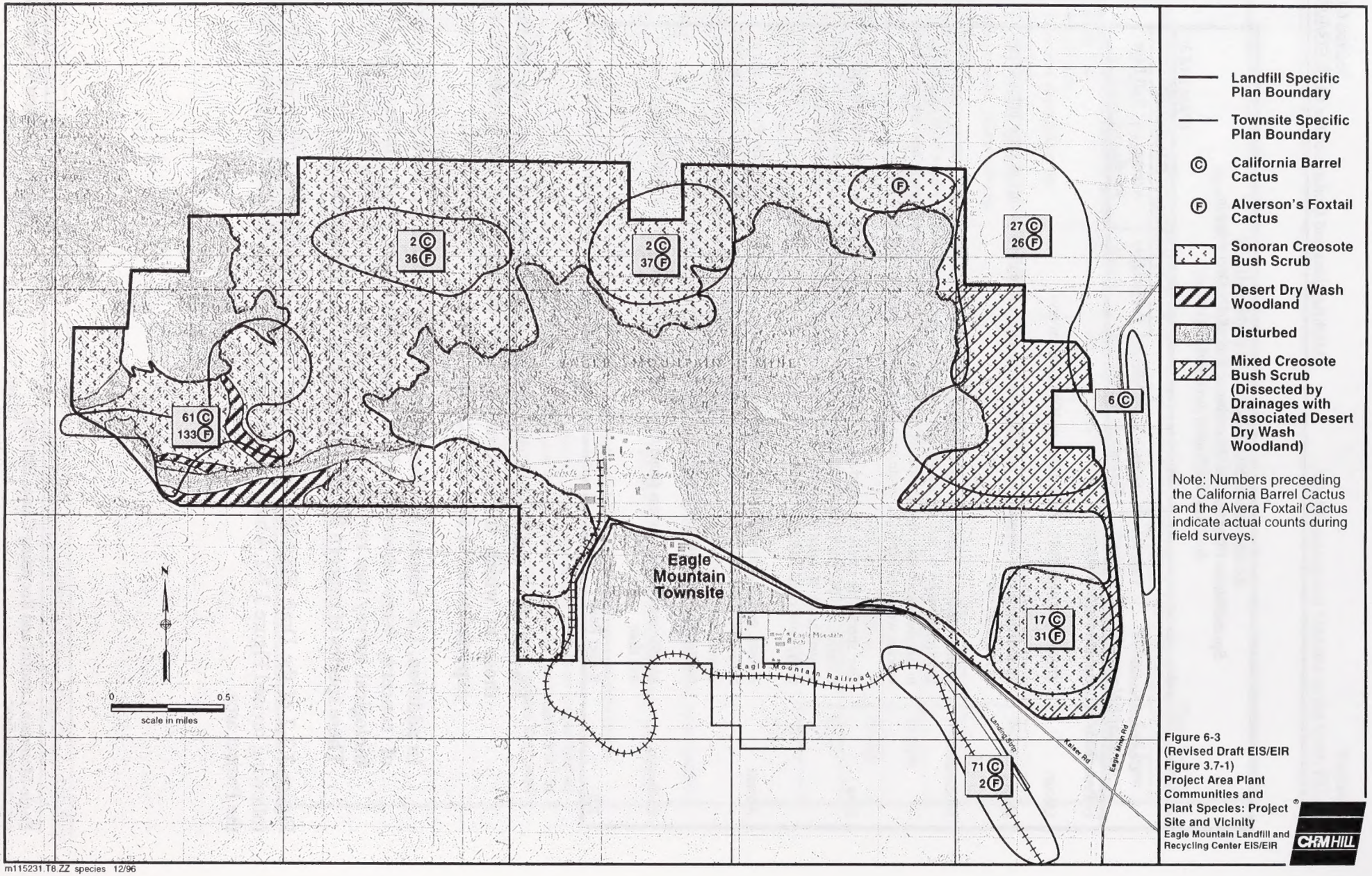
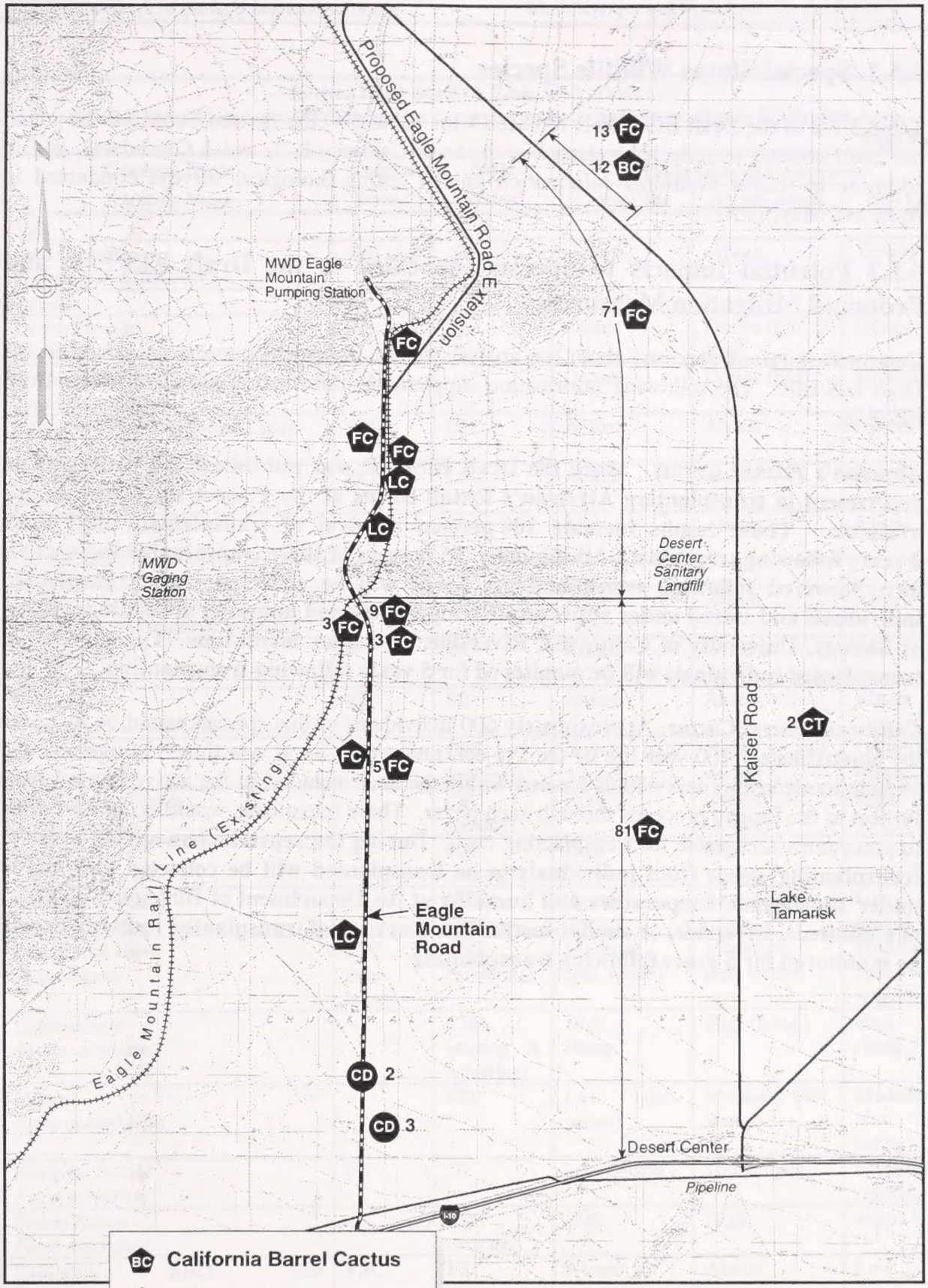


Figure 6-3
(Revised Draft EIS/EIR Figure 3.7-1)
Project Area Plant Communities and Plant Species: Project Site and Vicinity
Eagle Mountain Landfill and Recycling Center EIS/EIR

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m115231.T8.ZZ species 12/96



MWD: Metropolitan Water District of Southern California

Figure 6-4
(Revised Draft EIS/EIR Figure 3.7-2)
Project Area Plant Communities: Kaiser Road and Eagle Mountain Road
Eagle Mountain Landfill and Recycling Center EIS/EIR

CH2M HILL

m115231.T8.ZZ plant 12/96

6.5.2 Special Status Wildlife Species

Table 3.7-2 of the Draft EIS/EIR is replaced with Table 6-5 (the revised Table 3.7-2), which has been updated to reflect the change in status of Category 1, 2, and 3 Candidates, and in addition, to reflect additional information gained during biological surveys conducted in April and May, 1996.

6.5.3 Potential Impacts to Species Identified in the Draft EIS/EIR and Proposed Mitigation Measures

Commenters raised concerns about the analysis of the biological impacts contained in the Draft EIS/EIR. The following information supplements information provided in the Draft EIS/EIR.

Alverson's Foxtail Cactus. **Since the Draft EIS/EIR was published, the results of an experiment in transplanting Alverson's foxtail cactus at the Project site have become available. These results indicate 100 percent survival of transplanted individuals 2 years following transplant. Additionally, 95 percent of these transplanted individuals have flowered following transplanting. Seeds will be collected from transplanted individuals and stored under appropriate temperature and humidity at the Department of Biology, University of California, Riverside, or similar institution. The survival of transplanted individuals will be monitored for 5 years following transplanting.**

California Barrel Cactus. Approximately 600 individuals of this species would be lost over the approximately 100-year life of the Project, rather than all at one time. Mitigation will include transplanting individuals located within the area included in the active phase of the Project as the Project proceeds through each phase. These transplants would occur according to procedures acceptable for transplanting cacti. **During the reproductive season prior to transplanting, seeds from individuals to be transplanted will be collected and stored under appropriate temperature and humidity at the Department of Biology, University of California, Riverside, or similar institution. Survival of transplanted individuals will be monitored for 5 years following transplanting.**

Revised Draft EIS/EIR Table 3.7-2 (Table 6-5)
Special-Status Vertebrate Wildlife Species Occurring or Potentially Occurring in the Project Area
Page 1 of 4

Common Name *Scientific Name*	Federal Status[a]	State Status[a]	Probability of Occurrence[b]		
			Project Site	Access Roads	Rail Line
Fish					
Desert Pupfish *Cyprinodon macularius*	FE	SE	Absent	Absent	Occurs
Reptiles					
Desert Tortoise *Gopherus agassizii*	FT	ST	Occurs	Occurs (EM[c] & KR)[d]	Occurs
Common Chuckwalla *Sauromalus obesus*	**FSC**	--	Occurs	Occurs (EM)	Moderate
Colorado Desert Fringe-toed Lizard *Uma notata notata*	**FSC**	CSC	Absent	Absent	Absent
Flat-tailed Horned Lizard *Phrynosoma mcallii*	FPT	CSC	Absent	Absent	Moderate
Banded Gila Monster *Heloderma suspectum cinctum*	**FSC**	CSC	Absent	Absent	Absent
Birds					
California Brown Pelican *Pelecanus occidentalis californicus*	FE	SE, SA	Absent	Absent	Absent
White-tailed Kite *Elanus caeruleus*	--	SA	Absent	Absent	Low
Bald Eagle *Haliaeetus leucocephalus*	FT	SE	Absent	Absent	Absent
Northern Harrier *Circus cyaneus*	--	CSC (nesting)	High (fall, winter)	High (fall, winter)	Occurs (fall, winter)
Sharp-shinned Hawk *Accipiter striatus*	--	CSC (nesting)	High	Occurs (Kaiser)	High
Cooper's Hawk *Accipiter cooperii*	--	CSC (nesting)	High	High	High
Swainson's Hawk *Buteo swainsoni*	--	ST (nesting)	Occurs (migr.)	Low (migr.)	Low (migr.)
Ferruginous Hawk *Buteo regalis*	**FSC** (wintering)	CSC (wintering)	Moderate (fall, winter)	Moderate (fall, winter)	Moderate (fall, winter)
Golden Eagle *Aquila chrysaetos*	--	CSC (nesting & wintering)	High (forag.)	High (forag.)	High (forag.)
Merlin *Falco columbarius*	--	CSC	Low (fall, winter)	Moderate (fall, winter)	Moderate (fall, winter)
Peregrine Falcon *Falco peregrinus*	FE	SE	Low (migrat.)	Low (migrat.)	Moderate (migrat.)
Prairie Falcon *Falco mexicanus*	--	CSC (nesting)	High	High	High
California Black Rail *Laterallus jamaicensis coturniculus*	**FSC**	ST	Absent	Absent	Low

Revised Draft EIS/EIR Table 3.7-2 (Table 6-5)
Special-Status Vertebrate Wildlife Species Occurring or Potentially Occurring in the Project Area

Common Name *Scientific Name*	Federal Status[a]	State Status[a]	Probability of Occurrence[b]		
			Project Site	Access Roads	Rail Line
Yuma Clapper Rail *Rallus longirostris yumanensis*	FE	ST	Absent	Absent	Low
Western Snowy Plover *Charadrius alexandrinus nivosus*	--	CSC (breeding)	Absent	Absent	Moderate
Mountain Plover *Charadrius montanus*	**FSC**	CSC (wintering)	Absent	Absent	Absent
Elf Owl *Micranthe whitneyi*	--	SE (breeding)	Absent	Absent	Absent
Western Burrowing Owl *Speotyto cunicularia hypugea*	**FSC**	CSC	Moderate	Moderate	Moderate
Long-Eared Owl *Asio otus*	--	CSC	Absent	Low (fall, winter)	Low (fall, winter)
Vaux's Swift *Chaetura vauxi*	--	CSC	Moderate (migr.)	Moderate (migr.)	Moderate (migr.)
Gila Woodpecker *Centurus uropygialis*	--	SE	Low (forag., migr.)	Low (forag., migr.)	Moderate (forag., migr.)
Southwestern Willow Flycatcher *Empidonax tarillii extimus*	FE	SE (breeding)	Low (migr.)	Low (migr.)	Low (migr.)
Purple Martin *Progne subis*	--	CSC (nesting)	Low (migr.)	Low (migr.)	Low (migr.)
Eagle Mountain Scrub Jay *Aphelocoma coerulescens cana*	**FSC**	CSC	Low	Absent	Absent
Black-Tailed Gnatcatcher *Polioptila melanura*	--	SA	Occurs	Occurs (KR & EM)	Occurs
Bendire's Thrasher *Toxostoma bendirei*	--	CSC	Moderate	Moderate	Moderate
Crissal Thrasher *Toxostoma crissale*	--	CSC	Low	Low	Low
LeConte's Thrasher *Toxostoma lecontei macmillanorum*	**FSC**	CSC	High	Occurs (KR & EM)	High
Loggerhead Shrike *Lanius ludovicianus*	--	CSC	Occurs	Occurs (KR & EM)	High
Arizona Bell's Vireo *Vireo bellii arizonae*	--	SE (nesting)	Absent	Absent	Absent
Least Bell's Vireo *Vireo bellii pusillus*	FE	SE (breeding)	Absent	Absent	Absent
Virginia Warbler *Vermivora virginiae*	--	CSC	Low (migr.)	Low (migr.)	Low (migr.)
Yellow Warbler *Dendroica petechia*	--	CSC (nesting)	Occurs (migr.)	High (migr.)	High (migr.)

Revised Draft EIS/EIR Table 3.7-2 (Table 6-5)
Special-Status Vertebrate Wildlife Species Occurring or Potentially Occurring in the Project Area
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Common Name *Scientific Name*	Federal Status[a]	State Status[a]	Probability of Occurrence[b]		
			Project Site	Access Roads	Rail Line
Yellow-Breasted Chat *Icteria virens*	--	CSC (nesting)	Occurs (migr.)	Low (migr.)	Moderate (migr.)
Tricolored Blackbird *Agelaius tricolor*	**FCS**	CSC	Absent	Absent	Absent
Mammals					
California Leaf-nosed Bat *Macrotus californicus*	**FCS**	CSC	Occurs	High	High
Arizona Myotis *Myotis lucifugus occultus*	**FCS**	CSC	Absent	Absent	Absent
Arizona Cave Myotis *Myotis velifer brevis*	**FCS**	CSC	Absent	Absent	Absent
Spotted Bat *Euderma maculatum*	**FCS**	CSC	Within range	Within range	Within range
Townsend's Big-eared Bat *Plecotus townsendii townsendii*	**FCS**	CSC	Occurs	High	High
Pallid Bat *Antrozous pallidus*	--	CSC	Occurs	High	High
Pocketed Free-tail Bat *Nyctinomops femorosaccus*	--	CSC	Within range	Within range	Within range
California Mastiff Bat *Eumops perotis californicus*	**FCS**	CSC	Within range	Within range	Within range
American Badger *Taxidea taxus*	--	CSC	Occurs	Occurs (KR)	High
Mountain Lion *Felis concolor*	--	SA	**Unknown***	**Unknown***	**Unknown***
Yuma Mountain Lion *Felis concolor browni*	**FCS**	CSC	**Unknown***	**Unknown***	**Unknown***
Nelson's Bighorn Sheep *Ovis canadensis nelsoni*	--	SA	Occurs	Low	Occurs

(a) State and federal status definitions

Federal

FE Listed endangered by the USFWS

FT Listed threatened by the USFWS

FPE Species that have either been proposed by the USFWS or petitioned by the public for federal listing as an Endangered Species

FPT Species that have either been proposed by the USFWS or petitioned for federal listing as a Threatened Species

FSC **Species that need further biological research and field study to resolve their conservation status**

Per Federal Register Notice 7596, February 28, 1996 Category 1, 2 or 3 candidates have been reclassified as "candidate" species or species of concern by the U.S. Fish and Wildlife Service. Species designated FSC in this table have been reclassified according to this Federal Register Notice. FSC are those species that need further biological research and field study to resolve their conservation status.

State

SE Listed endangered by Fish and Game Commission

ST Listed threatened by Fish and Game Commission

Revised Draft EIS/EIR Table 3.7-2 (Table 6-5)
Special-Status Vertebrate Wildlife Species Occurring or Potentially Occurring in the Project Area
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CSC	California Species of Special Concern, which when encountered, should be reported to the Department, and for which impacts may be considered significant under the California Environmental Quality Act, depending on the specific situation
SA	Special Animal, which is an animal fully protected by the state

(b) Probability of occurrence definitions

Occurs	Observed during winter 1995 surveys or during RECON's earlier surveys.
High	The species is commonly reported from the area, has been observed in adjacent regions, occurs in the same habitat type as found on-site, and may with some certainty be observed at most, daily, and at least, yearly, within the Project area.
Moderate	The habitat on-site is the type used by the species, but the site is peripheral to or out of its functional range, or the species is a migrant that may incidentally be found within the Project area; the species would be expected onsite or in the vicinity at least, every several years, and at most, monthly, particularly during the migratory season for applicable species.
Low	The species is rarely reported from the area, or only historically, and the habitat type is occasionally used by the species; the species may either occur in limited areas of suitable habitat, or be solely incidental to the site during the migratory period.
Absent	Habitat required by the species is absent; or, if there is suitable habitat, the Project site is sufficiently isolated from known populations that there is no, or very little, likelihood that the species would immigrate into the area; in the case of migratory passerines, the sites may be within the flyway and the birds may stop to rest or forage, but they would not remain onsite or in the area for more than a few hours or days.
Within Range	The site is within the known range of the species, but the actual likelihood range of occurrence is unknown at this time.
Unknown	Insufficient information was found to determine if the species occurs within the Project area at this time.

(c) EM = Eagle Mountain Road

(d) KR = Kaiser Road

* **The taxonomic identification of the mountain lion known to include the Project site in its territory is uncertain (pers. comm. G. Mulcahy, CDFG).**

Figure 3.7-3 of the Draft EIS/EIR is replaced with Figure 6-5 (the revised Figure 3.7-3), which identifies the location of Desert Tortoise scat found during the 1996 biological surveys (as reported in Appendix G of the Draft EIS/EIR).

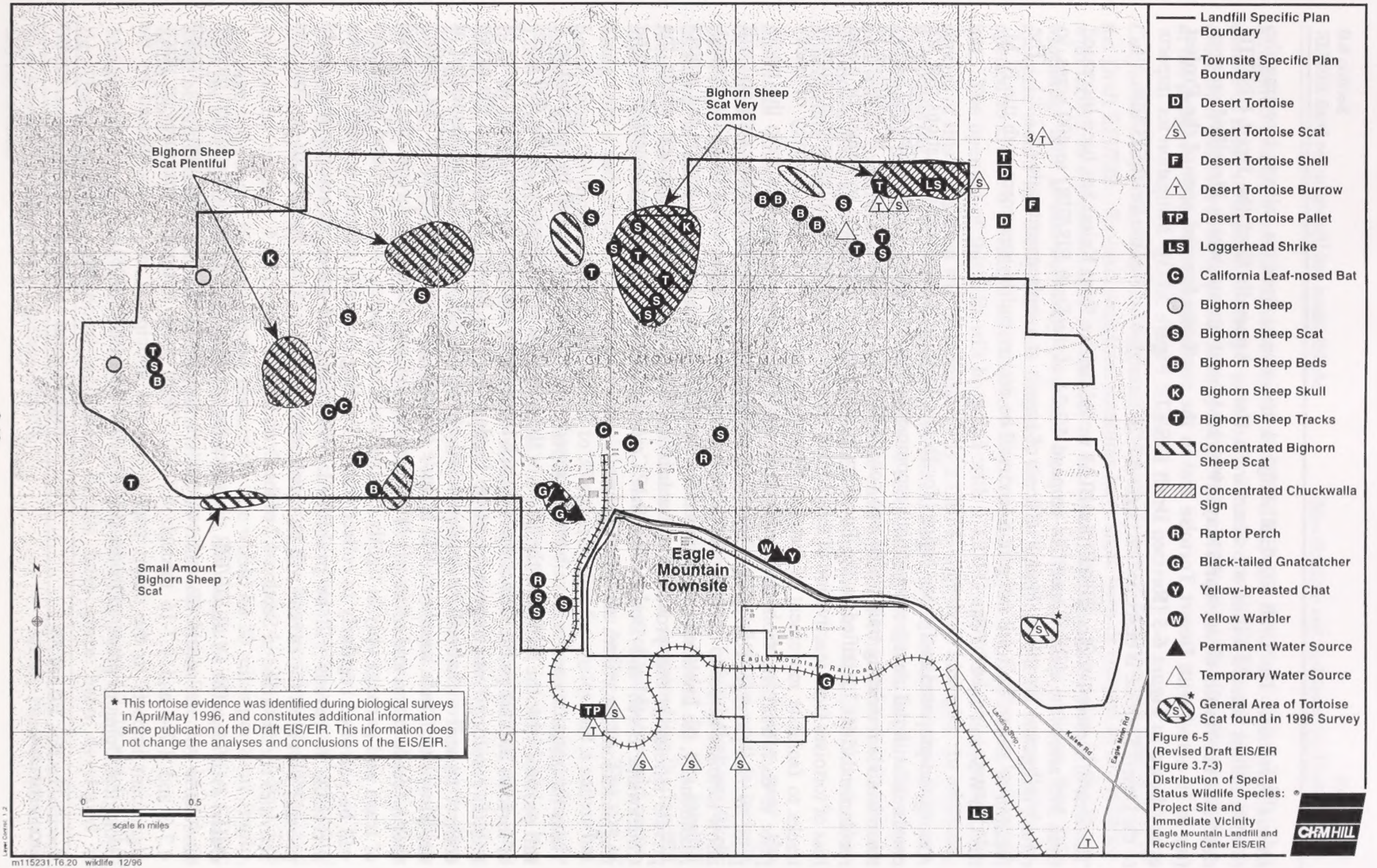


Figure 6-5
(Revised Draft EIS/EIR
Figure 3.7-3)
Distribution of Special Status Wildlife Species: Project Site and Immediate Vicinity
Eagle Mountain Landfill and Recycling Center EIS/EIR

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Desert Tortoises. The Draft EIS/EIR analyzed the impacts from the railway bisecting the tortoise habitat located within the Chuckwalla Unit. **Appendix G of the Draft EIS/EIR describes the results of the April/May, 1996, biological survey, which identified an area (up to 10 acres) with Desert Tortoise scat in the southeast bermed area of the Project area (shown in Figure 6-5 [Revised Draft EIS/EIR Figure 3.7-3].** Mitigation for impacts to the Desert Tortoise is described on pages 4.7-20 through 4.7-28 of the Draft EIS/EIR.

The area of Desert Tortoise habitat that BLM would receive from Kaiser has been increased from 375 acres (the amount specified on page 4.7-24 of the Draft EIS/EIR) to **400** acres, to reflect mitigation for the additional 10 acres of impact at a replacement ratio of 2.5:1. The location of Desert Tortoise mitigation land will be determined in agreement with the BLM, the USFWS, and the CDFG.

Among the proposed mitigation actions for Desert Tortoise impacts are mitigations that are consistent with the management actions recommended in the Desert Tortoise Recovery Plan; these include restricting train traffic and constructing certain barrier fencing. In addition to recommendations identified in the Recovery Plan, proposed mitigation to reduce or avoid loss of tortoises from reactivation of the railroad includes placement of ballast within railroad tracks to facilitate movement of tortoises from between the tracks, and a survey of tracks prior to each train trip from February 1 to October 31 to remove tortoises from the tracks prior to train passage. This mitigation will allow safer passage than currently exists and will allow tortoises access to habitat on both sides of the tracks throughout the life of the Project. Additionally, the Environmental Mitigation Trust will be used, in part, to acquire and protect private inholdings that provide tortoise habitat (and habitat for other species) within the Chuckwalla Berch and Dos Palmas/Salt Creek ACECs, thus reducing potential habitat fragmentation for tortoises and other species.

These mitigation measures have been **discussed with CDFG, which will be included as a full partner with the NPS and the BLM in the approval of the location of the 400 acres of tortoise habitat on the Chuckwalla Bench intended to mitigate the loss of 160 acres of habitat resulting from improvements to Eagle Mountain Road. In addition, the raven control measures that will be implemented at the landfill will also be implemented at the Townsite. These measures will include educating Townsite residents of the factors that increase raven and other predator populations, and restrictions requiring disposal of trash and garbage only in tightly closing trash receptacles. Areas around businesses will be patrolled regularly to collect trash. Feeding domestic animals outside in areas accessible to ravens will be prohibited. Buildings and other structures that could provide nest sites for ravens will be monitored regularly.** Other restrictions on Townsite activities are described in Section 4.7 of the Draft EIS/EIR.

Desert Pupfish. The Draft EIS/EIR discusses the potential for impacts to the desert pupfish associated with rail accidents and construction and identifies mitigation measures (pages 4.7-3 and 4.7-4 and 4.7-16 through 4.7-19). With these mitigation measures in place, significant impacts to the desert pupfish are not anticipated, as was confirmed by the Biological Opinions prepared by the USFWS (USFWS, 1992, 1993).

Mitigation measures are identified in the Draft EIS/EIR (pages 4.7-16 through 4.7-19). The **details of these mitigation measures have been discussed with CDFG and CDFG would determine the source of the individual pupfish collected for establishing the population at the proposed Deep Canyon Reserve.**

California Leaf-Nosed Bats. Mitigation for impacts to bats is described on page 4.7-29 of the Draft EIS/EIR. Revised mitigation measures have since been developed in consultation with CDFG as a result of CDFG responses to the Draft EIS/EIR. **Extension of the Eagle Mountain adit is not currently proposed because of the CDFG's opinion that this measure would not likely succeed. Instead, the Black Eagle adit will immediately be opened to create a potential alternative winter roost site for the California leaf-nosed bat. The opening of this adit will be gated with a CDFG-approved bat gate and the success of this mitigation will be monitored by a CDFG-approved biologist. In addition, if monitoring at the Eagle Mountain and Black Eagle adits indicates that bats are abandoning the Eagle Mountain adit and not recolonizing the Black Eagle adit, a new adit will be constructed that provides suitable environmental conditions for California leaf-nosed bats at a location to be determined in conjunction with CDFG and other appropriate resources agencies.**

Mountain Lion. **A single mountain lion is known (based on sightings near the community correctional facility and pug marks [i.e., footprints] at the well) to include the Project area in its territory. Approximately 1,038 acres of habitat that are likely included in the resident mountain lion's home range are included in the landfill footprint. An additional 644 acres will be retained in a zone surrounding the landfill area to buffer wildlife from landfill activities. Some actual loss of habitat would occur, along with a reduction in the value of remaining habitat in the buffer area. The size of home range for mountain lions is from 25 to 35 square miles for males and a somewhat smaller area for females (Nowak and Paradiso, 1984). The loss of approximately 1,000 acres (approximately 1.5 square miles) of available habitat is considered a less than significant impact to the individual mountain lion that occupies this area, and would not be considered a significant impact. Although impacts to the mountain lion are not expected to be significant, the special emphasis on mountain lion protection established by Proposition 117, Section 6, is reason to recommend that the acquisition of mountain lion habitat be a priority use for the Project's Environmental Mitigation Trust Fund.**

Nelson's Bighorn Sheep. The Draft EIS/EIR discusses the potential for losses of individual Nelson's bighorn sheep to train kills and the potential for fragmentation of habitats and populations on page 4.7-12, with mitigation described on page 4.7-29 and 4.7-30. **The average train speed for trains going toward the site would be 20 miles per hour (mph), and the average speed for trains leaving the Project site would be 40 mph. The CDFG shall be notified of the loss of any Bighorn sheep by train kill within one day of such an occurrence.**

Mitigation for impacts to Nelson's bighorn sheep is described on pages 4.7-29 and 4.7-30 of the Draft EIS/EIR. **Additional mitigation details have since been developed in**

consultation with the CDFG. Key among the mitigation measures included in the Project design is the establishment of a 644-acre buffer zone that includes habitat for this species. Four permanent water sources will be established, two near the Project site at locations recommended by CDFG and two along the railroad south of Interstate 10 at locations to be determined with CDFG and NPS biologists. The water sources are mitigation for loss of habitat. Water sources will be filled by MRC if natural runoff is insufficient to maintain them. The tanks will be designed in conjunction with CDFG. There will be a "four-time" replacement requirement so that the water sources will be functional throughout the life of the Project. Domestic livestock, including cattle, sheep, swine, and goats, will not be permitted to be kept at the Townsite to prevent the transmission of diseases that could affect the Nelson's bighorn sheep. All domestic dogs will be required to be restrained and controlled at the Townsite to prevent them from harassing or killing sheep. Bighorn sheep use the entire Eagle Mountain range, and would use newly located water sources without being translocated. (See Divine and Douglas, 1996, in Appendix N).

6.6 Visual and Recreation (Sections 3.10 and 4.10 of the Draft EIS/EIR)

Since the Draft EIS/EIR was issued, additional analysis of the potential for nighttime lighting impacts was prepared. Section 3.10.3, Night Lighting, is replaced with the following material:

3.10.3 Night Lighting

The Project site is generally remote. There are three major light sources within the vicinity of the Project--the Eagle Mountain Pump Station, the Townsite of Eagle Mountain, and the detention facility located on the edge of the Townsite. The pump station is located to the south of the Project site, at the foot of the Eagle Mountains, just west of the JTNP boundary. The pump station is a substantial facility with a large substation. Both the substation and the pump station are extensively illuminated. The lighting at the pump station, the detention facility, and the Townsite includes both High Pressure Sodium (HPS) and Metal Halide lights. The majority of the lights do not have cut-off optics and are visible many miles away. There are stadium flood lights at the local school. The most light-sensitive land uses in the Project vicinity are the isolated, back-country portions of JTNP lying near the JTNP boundary. The term "back-country" refers to undeveloped areas of JTNP in the vicinity of the mine site to the south and west (i.e., the Eagle Mountains), north (Pinto Wells) and east (Coxcomb Mountains).

Existing activities at the mine site itself are limited primarily to administrative/property management activities with minimal illumination. The correctional facility and surrounding grounds are intensely illuminated at night with low pressure sodium lights. In addition, street lighting and other existing

Fixtures within the Townsite (e.g., lights from residences) and vehicle lights on Kaiser Road contribute to an overall nighttime glow that emanates from the Project area. The night lighting at the Townsite is visible throughout the Chuckwalla Valley, as far as 30 to 40 miles distant along portions of Interstate 10 near Blythe (James Irish, CH2M HILL, personal communication with Orlo Anderson, MRC, 1995). This glow is supplemented by existing development in the Chuckwalla Valley (i.e., Desert Center, Lake Tamarisk, and Blythe) and the headlights of vehicles traveling along Interstate 10 and Highway 177 (the average daily traffic flow recorded on Interstate 10 at the Eagle Mountain Road interchange was 13,500 vehicles).

Skyglow is largely light from non-cutoff types of luminaries, which direct light upward above the plane of the luminary, and from light reflected off the ground surface. Skyglow currently exists in the Project area, and is generated by the Townsite, the detention facility, and the pump station. The rough terrain of the Project area and the typical atmospheric conditions (clear skies, calm winds, and low humidity) tend to reduce skyglow. However, as measured within 2 miles of the Project site, the existing skyglow is approximately 12 percent above background (natural light) night conditions.

The material on nighttime lighting in Section 4.10.4 of the Draft EIS/EIR (all of page 4.10-42 and the first two paragraphs on page 4.10-43) are replaced with the following material:

4.10.4 Nighttime Lighting and Glare

The landfill would operate 6 days per week, 16 hours per day, from 7:00 a.m. to 10:00 p.m. The intermodal rail yards, landfill waste recovery facility, and other areas of the site that receive waste would have lighting of some type during the night hours of operation. In most of the areas, lighting would consist of the minimum level of security lighting required. Security lighting would remain on after operations shut down from 10:00 p.m. to 7:00 a.m. During night operating hours, lighting in the intermodal rail yards would be restricted to the lights on the overhead intermodal cranes and a lighted walkway for crane operators to move between the cranes and the buildings and yard entrance/exit. Each of the two rail yards would have a maximum of 5 cranes, for a total of 10 cranes for the entire Project. Each crane would light about a 1/2 acre in area. The walkway lighted area would be approximately ten feet wide by seventy-five hundred feet long. A 2-acre working landfill face would also operate during this period. Vehicles traveling to and from the working face and equipment operating at the working face would use headlights after dark.

In order to minimize direct and indirect lighting impacts to the surrounding area and to JTNP, the following measures have been incorporated into the Project:

- **No up-lighting will be used.**
- **Any required floodlights will have glare shields installed, and be aimed at a 45° angle, minimum, toward the ground.**
- **Cut-off type roadway lights will be used around the perimeter of areas requiring lighting, and will be aimed into the site, away from JTNP. If required, side shields will be added to further minimize light trespass.**
- **Light levels will be reduced after 10:00 p.m. to minimal levels required for security and safety.**
- **Lighting types will be reviewed with the NPS; low pressure sodium lights are proposed as the primary source for exterior lighting, supplemented with some quartz lights on the cranes and high pressure sodium lights where required for the type of work being illuminated.**
- **All existing non-cut-off type lights within the Project site and Townsite will be changed to cut-off types. Mercury lights will be replaced with sodium lights except in areas where worker safety requirements require other types of lighting.**
- **The Project site lighting levels will be designed not to exceed the Illuminating Engineering Society (IES) recommended levels for the proposed activities.**

The proposed areas of the Project site requiring nighttime lighting (e.g., site entrance, primary rail yard, vehicular weigh station, local waste receiving center, and truck marshaling yard) would be located adjacent to or near existing light sources. The major existing nighttime light source in the Project site is the Townsite (e.g., correctional facility and street lighting), which is a substantial existing source of light that is visible for more than 30 miles from the Project site. An additional source of light is the Eagle Mountain Pumping Plant just south of the Townsite.

The Project site is remote, and land uses in the site vicinity that would be considered light-sensitive are primarily the backcountry wilderness areas along the perimeter of the JTNP boundary. Because of the prohibition on the use of motor vehicles, the harsh desert conditions (e.g., temperature), and limitations on backpacking due to the need to carry water, visitor use in the JTNP wilderness areas of the Eagle and Coxcomb Mountains is generally low, particularly at night.

Night lighting at the Project site could result in a potential for direct light impacts and skyglow. With the above-mentioned features incorporated into the Project, direct visual impacts to wilderness areas within the JTNP would be minimized and would not be significant. Locations within JTNP that have direct views of the Project site also have, at a minimum, views of the existing Townsite, the community correctional center, and other existing light sources in the area.

Skyglow already exists in the Project vicinity as a result of activities occurring at the Townsite, the detention facility, and the pumping station. Development of the Project would increase the amount of skyglow in the immediate vicinity of the Project area (i.e., at the Project site and within 2 miles) from approximately 12 percent above background without the Project to 22 percent with the Project, but would not result in increases in skyglow perceptible from greater distances. At viewing locations at least 5 miles from the Project site, there would be no perceptible increase in skyglow.

As noted in section 3.10.3, skyglow is minimized in the Project area because of the typical atmospheric conditions and the rough terrain. By using cut-off type light exclusively for Project site lighting, the Project would not increase the amount of light directed upward above the plane of the light. The project lighting would, however, increase the amount of reflected light contributing to skyglow. As noted above, the increase in skyglow would only be perceptible in the immediate vicinity of the Project, but not from more distant viewing locations. In addition, intervening topographic features, such as the Eagle Mountains, block direct views of the night sky above the site from distant viewer locations.

The Project's minimal contribution to existing skyglow would be higher during fall and winter months, and lower during spring and summer months. For example, the Project would be illuminated for approximately 1 to 2 hours after dusk during spring and summer months, as opposed to 4 to 5 hours during fall and winter months. The perceptible increase in skyglow in the immediate vicinity of the Project would only occur during the dusk to 10 p.m. period of operations.

A more detailed analysis of potential light impacts is presented in Appendix W of the Final EIS/EIR.

6.7 Groundwater Quality and Use

6.7.1 Current Groundwater Use in the Chuckwalla Basin

Since the Draft EIS/EIR was prepared, additional information on agricultural and aqua (fish) farming water use in the western Chuckwalla Basin has been obtained and evaluated. In addition, the total groundwater requirements for the proposed Project have been refined. This section updates both the existing conditions and the environmental consequences for groundwater resources (Sections 3.1 and 4.1 of the Draft EIS/EIR). This additional information does not change the conclusions in the Draft EIS/EIR.

The estimate of water use in the western Chuckwalla basin has been updated to reflect 1995 conditions (the most recent estimate in the Draft EIS/EIR was for 1994). Table 3.1-3 of the Draft EIS/EIR has been updated accordingly as Table 6-6, below. The table shows an

increase in the estimate of agricultural and commercial/domestic water use by approximately 1,765 ac-ft to 8,865 ac-ft in 1995. Much of the commercial use of water is for aqua (fish) farming operations, which have increased in the Chuckwalla Valley since the early 1990s. These operations require the constant circulation of water to maintain the fish, and typically cycle the water onto agricultural fields to irrigate crops such as jojoba, asparagus, or citrus. Consequently, the demand for water to support these fish farms has increased in recent years, but the pumpage specifically for irrigation has generally decreased.

Revised Draft EIS/EIR Table 3.1-3 (Table 6-6)
Estimated Groundwater Pumpage in the Chuckwalla Basin in Acre-Feet

Groundwater Use	1986[1]	1992[2]	1995
Agricultural	22,040	5,600	**3,325[3]**
Commercial/Domestic[4]	920	2,500	**5,540[3]**
Chuckawalla/Ironwood Prisons [7]	**0**	**775[6]**	**1,800[5]**
Total	22,960	**8,875**	**10,665**

[1]Source: Previous EIS/EIR (BLM and County of Riverside, 1992); Mann (1986)
[2]Source: Personal correspondence from James C. Hanson Consulting Engineers to Dr. J.H. Birman, Geothermal Surveys, Inc., 1992.
[3]Source: Based on personal correspondence from Mr. Vince Samons to Mr. Art Lowe, Eagle Crest Energy Company, 1994, field inspections, and local population.
[4]Includes water for Lake Tamarisk, Kaiser, aqua (fish) farms and private domestic and commercial uses
[5]Represents combination of the total volume of water treated in 1995 to meet inmate and staff demand (453.7 million gallons = 1,392 ac-ft) plus an estimate of 408 ac-ft for irrigation for both Ironwood and Chuckawalla Valley State Prisons.
[6]Estimated value based on use for only Chuckawalla Valley State Prison (Ironwood State Prison was not occupied; its wells were not installed until December 1992).
[7] The water pumped from these prison wells is not considered to influence groundwater conditions in the western Chuckwalla Basin but is included to provide a basin-wide estimate of water use.

In addition, a pumping estimate from the six wells that serve the Chuckawalla and Ironwood State Prisons (there are no direct measurements of total pumpage from these wells) has been added to the estimate of total groundwater withdrawals from the Chuckwalla Basin. Although these wells are technically within the basin, they are located at the basin's downgradient edge where groundwater flows eastward from the Chuckwalla Basin into the Palo Verde Mesa Basin. Consequently, the prisons' wells, which are more than 30 miles east of the Desert Center area where most of the basin's groundwater pumping occurs, essentially capture a portion of the groundwater that naturally flows out of the basin (given 1995 estimated groundwater use). Pumping from these wells is not, therefore, considered to influence groundwater conditions in the western Chuckwalla Basin, but the pumped amount is included to provide a basin-wide estimate of water use.

Even if the combined pumping for both prisons (approximately 1,800 ac-ft/yr) is added to the other components in the updated estimate of groundwater use, the revised total would be 10,665 ac-ft. This level of pumping remains below the estimate of annual average recharge to the basin of 12,240 ac-ft/yr (see Section 3.1.1.2 of the Draft

EIS/EIR). As a result, the conclusion in the Draft EIS/EIR that the Chuckwalla Basin is not currently in overdraft is not changed by the updated information on groundwater use in the basin.

6.7.2 Groundwater Demand by the Proposed Project

The total water demand of the proposed Project has been updated to account for the community correctional facility at the Townsite, and Table 4.1-1 of the Draft EIS/EIR has been revised accordingly as Table 6-7, below.

Revised Draft EIS/EIR Table 4.1-1 (Table 6-7)
Summary of Maximum Annual Water Use by the Proposed Project

Activity	Use in Gallons	Use in Ac-Ft
Landfill Operations (previous EIS/EIR)[1]	642,674,800	1,972
Landfill Operations (currently proposed Project)[2]	348,621,663	1,070
Townsite[3,4,5,6]	**74,614,795**	**229**
Total Maximum Annual Water Use (current Project)	423,251,611	1,299

1. Source: BLM and County of Riverside, 1992
2. Source: Morrison Knudsen, 1995
3. Townsite water demand has been adjusted to prevent double counting of personnel employed for operation of the landfill (i.e., water demand equals 807 total population minus 163 landfill personnel and the difference multiplied by 240 gal/person/day). The water demand for Townsite residents is 173 ac-ft/yr. In addition, the anticipated Townsite commercial water use is assumed to be "neighborhood light" with a demand equivalent to 1,100 gallons/acre, which corresponds to 1 ac-ft/yr.
4. **Community correctional facility demand is 55 ac-ft/year**
5. **Actual annual Townsite water demand for groundwater will be less than 229 ac-ft because the drinking water component will be met by bottled water.**
6. Townsite water demand was not included in previous EIS/EIR.

Although the total maximum annual demand of 1,299 ac-ft includes the Townsite (including the MTC facility), the value still represents a 34 percent (or 673 ac-ft/yr) reduction in water use by the proposed landfill operations over the previous EIS/EIR (BLM and County of Riverside, 1992). The reduction in water demand for the proposed Project from that of the previous EIS/EIR results from a concerted effort to minimize overall water use by the Project. Specifically, since the previous EIS/EIR was certified in 1992, the following measures have been incorporated (see Section 2, Project Description): (1) the liner design includes a geosynthetic liner for the side slopes where a compacted clay liner was previously proposed; (2) access roads will be paved, minimizing the water requirements for dust suppression; and (3) alternatives to water will be used as dust suppressants.

Consistent with the updated value of Townsite water demand, the discussion of water requirements in the Section 4.12 (Utilities and Services, page 4.12-4) is revised to state that water consumption within the Townsite would increase to approximately 204,424

gallons per day. This does not alter the conclusion in the Draft EIS/EIR that there are no significant environmental effects associated with this water use (see Section 4.12.2.1).

6.7.3 Environmental Consequences

The updated estimate of current (1995) groundwater use in the Chuckwalla Basin does not alter the conclusion in the Draft EIS/EIR that the basin is not currently in overdraft. Specifically, the updated value of 10,665 ac-ft/yr is less than the total annual basin recharge of 12,240 ac-ft (see Section 3.1.1.2 of the Draft EIS/EIR) by 1,575 ac-ft.

In addition, when the annual water demand of the proposed Project is added to the updated current groundwater use in the basin, the sum is less than the total annual basin recharge (i.e., the conclusion in the Draft EIS/EIR that the proposed Project will not cause the Chuckwalla Basin to be in overdraft (see Section 4.1.3.1 [page 4.1-29]) is not changed with the additional information).

Specifically, the difference between the total basin pumpage and the annual recharge is greater than the updated maximum annual water demand of the proposed Project. It is also important to note that the estimate of total basin pumpage (i.e., 10,665 ac-ft [see revised Table 3.1-3 above]) includes 589 ac-ft of groundwater currently pumped by Kaiser to meet the water demand of the MTC facility and approximately 200 Townsite residents, and to provide dust control and other maintenance/landscape irrigation requirements at the Townsite and mine site. Because these demands are also components of the proposed Project water demand, the 589 ac-ft pumped by Kaiser should be subtracted from the total basin pumpage to avoid double counting water already being pumped. As a result, the total maximum annual pumpage in the basin with the proposed Project would be 11,375 ac-ft/yr. Because the total average annual recharge to the basin is estimated to be 12,240 ac-ft/yr, pumping to meet the groundwater demands of the proposed Project would not cause the basin to be in overdraft.

The determination of the effect of the proposed Project on basin overdraft is summarized in Table 6-8.

Table 6-8
Summary of Basin Water Use Status with Proposed Project

Water Balance Component	Value (ac-ft/yr)
Total (1995) groundwater pumpage from the Chuckwalla Basin[1]	10,665
Maximum annual groundwater demand for the proposed Project[2]	1,299
Portion of the total basin pumpage estimate that includes a portion of the demand of the proposed Project (i.e., current Kaiser pumping)[3]	589
Total basin pumpage excluding current Kaiser pumping[4]	10,076
Maximum annual pumpage in the basin with the proposed Project[5]	11,375
Total average annual recharge to the Chuckwalla Basin[6]	12,240
Amount that basin recharge exceeds basin pumpage with the proposed Project[7]	865

[1] Includes current Kaiser pumping (see Revised Table 3.1-3).
[2] Total maximum water demand for: (1) landfill operations; (2) Townsite population; (3) Townsite commercial requirements; and (4) the MTC facility. (see Revised Table 4.1-1).
[3] Current water demands for the MTC facility and approximately 200 Townsite residents, and dust suppression are also part of the demand of the proposed Project.
[4] Total basin pumpage (10,665 ac-ft) minus current Kaiser pumping (589 ac-ft) = 10,076 ac-ft
[5] Basin pumpage, excluding Kaiser pumping, (10,076 ac-ft/yr) + maximum annual water demand for the proposed Project (1,299 ac-ft/yr) = 11,375 ac-ft/yr.
[6] see Section 3.1.1.2 of the Draft EIS/EIR.
[7] Total average annual recharge (12,240 ac-ft/yr) - maximum annual pumpage in the basin with the proposed Project (11,375 ac-ft/yr) = 865 ac-ft/yr.

The updated groundwater use for the proposed Project has also been evaluated in relation to groundwater-level declines that correspond to substantial groundwater depletion (see Section 4.1.1.2 [page 4.1-2] of the Draft EIS/EIR for discussion of the significance criteria for groundwater use). This evaluation involved the same simulation scenarios described in Section 4.1.3.1 [page 4.1-26] and Appendix C-1 of the Draft EIS/EIR. The groundwater conditions simulated and the value of aquifer parameters used as input were conservative in order to determine the maximum potential decline in groundwater levels. Specifically, it was assumed that there was no regional hydraulic gradient, and the value of hydraulic conductivity (0.01 cm/s) was the highest available and the values of specific yield (0.1) and aquifer thickness (200 feet) were the lowest of their respective ranges of available values.

The results of the simulations, presented below in revised Table 4.1-2, are essentially the same as presented in Table 4.1-2 of the Draft EIS/EIR. Therefore, the conclusion in the Draft EIS/EIR that groundwater pumping for the proposed Project will not significantly affect the water-level in the nearest non-Project well (see Section 4.1.3.1 [page 4.1-27]) is not changed

by the updated water demand for the proposed Project. It is noted that the conclusion of a cumulatively significant impact of groundwater overdraft (Sections 1.8 and 5.5.2.1 of the Draft EIS/EIR) has not changed.

Revised Draft EIS/EIR Table 4.1-2 (Table 6-9)
Results of Approximations of Groundwater Level Declines

Pumping Rates	Duration of Continuous Pumping	Groundwater Level Decline (feet)				
		CW-3A	CW-4	Observation[1]	5 Miles	10 Miles
CW-3A = 378 gpm CW-4 = 427 gpm	1 year	18	22	<1	<1	<1
	10 years	23	28	3	1	<1
	100 years	38	42	15	8	3

[1]Observation well (4S/15E-16) located approximately 12,000 feet southwest of CW-3A and 12,350 feet west southwest of CW-4.

7.0 Summary / Major Comment Areas

7.0 Summary of Major Comment Areas

7.1 Introduction

Approximately 250 comment letters were received on the Eagle Mountain Landfill and Recycling Center Draft Environmental Impact Statement/ Environmental Impact Report (Draft EIS/EIR) during the 67-day public review period. In addition, 77 people testified at one or more of the four public hearings held throughout the County of Riverside (County) in August 1996. A summary table at the beginning of Volume II lists all the individuals, agencies, and organizations that submitted written or oral comments on the Draft EIS/EIR.

7.2 General Comments and Responses

In reviewing and considering the written and oral comments received on the Draft EIS/EIR, it became apparent that many commenters raised similar and overlapping issues. Consequently, to aid both the decisionmakers and the reviewing public, the following General Responses have been developed to address the key issues that were often raised during the public review period. These general responses are intended to summarize and supplement, but not replace, specific responses to individual comments submitted and are not intended to respond to every issue raised.

The individual responses to comments are cross-referenced to these General Responses, and in some instances, responses to other comment letters. The General Responses are summarized into the following categories:

1. The basic need for additional landfill capacity

2. Alternatives to the proposed Project

3. Potential impacts to Joshua Tree National Park

4. The land exchanges and rights attached to them

5. The adequacy of the landfill liner system to withstand seismic events and prevent groundwater from becoming contaminated

6. The potential impacts to biological resources

7. Potential impacts to air quality

7.2.1 General Response 1

A number of commenters questioned the Draft EIS/EIR's discussion of the basic need for additional landfill capacity. The Draft EIS/EIR conducted a detailed analysis of the need to develop new Class III nonhazardous municipal solid waste landfill capacity for Southern California. This analysis included reviewing all available information concerning the Southern California region's waste generation and disposal needs, and developing short-term, medium-term and long-term assessments of the need for waste-disposal capacity in the Southern California region. The Draft EIS/EIR reviewed waste disposal capacity information contained in the countywide integrated waste management planning documents for seven counties in Southern California (Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, San Diego, and Ventura).

The Draft EIS/EIR analysis discloses that in the medium term (1996 to 2020), approximately 481 million tons of waste from the seven-county disposal region will require disposal annually, and that there will be inadequate permitted disposal capacity in Southern California for these needs. By the year 2020, approximately 48,000 tons per day of additional permitted disposal capacity beyond that currently existing will be required to meet the seven-county region's needs, assuming that the region meets the state-mandated recycling goals. The Draft EIS/EIR notes that some of the needed increase in disposal capacity could result from repermitting and expansion of existing capacity in currently permitted landfills, which could extend the life of some of these landfills by up to 10 years. The Draft EIS/EIR analyzed the case of all existing landfills being repermitted and/or expanded and proposed new landfills, which still resulted in a shortage in the seven-county region in disposal capacity of approximately 40,000 tons per day by the year 2020.

Additional recycling would also be inadequate to eliminate the need for additional landfill capacity. Even if recycling rates were hypothetically to increase above the 50 percent recycling rate mandated by Assembly Bill 939 (AB 939) to 70 percent by the year 2020, and the amount of waste generated regionally was reduced from approximately 71,000 to 47,000 tons per day (tpd), the amount of waste generated would still exceed existing permitted disposal capacity by more than 20,000 tons per day by the year 2020.

Since the Draft EIS/EIR was released in July 1996, several landfills in the Southern California region have closed, and some have been expanded (Table 1). The Azusa Landfill (6,000 tons per day [tpd]) in Los Angeles County, the Lopez Canyon Landfill (permitted for 4,000 tpd) in the San Fernando Valley region of Los Angeles, Bailard Landfill (1,500 tpd) in Ventura County, and the BKK Landfill (13,200 tpd), located near the City of West Covina, have closed. The San Marcos Landfill (3,000 tpd) is scheduled to close in early 1997. Elsmere Canyon, a regional landfill site proposed for the Angeles National Forest that would have required a land exchange with the U.S. Forest Service, cannot now occur as a result of recent federal legislation. Acting in response to court order, the Regional Water Quality Control Board (RWQCB) recently ordered the Azusa Landfill (6,000 tpd) to cease accepting municipal solid waste. Moreover, on November 11, 1996, the Los Angeles County Public Works Department announced that it was no longer considering Mission, Rustic, and Sullivan Canyons as candidate sites for County landfills.

The Sunshine Canyon Landfill expansion in unincorporated Los Angeles County was approved in September 1996, resulting in an increase in regional capacity by 6,000 tpd. The Toland Road Landfill was recently approved for expansion by Ventura County; current expansion scenarios for that

Table 7-1
Regional Landfill Capacity Changes Subsequent to Draft EIS/EIR Eagle Mountain Landfill and Recycling Center Project

Decreased Capacity			Increased Capacity		
Landfill	**County**	**Capacity (tpd)**	**Landfill**	**County**	**Capacity (tpd)**
Azusa (closed)	Los Angeles	6,000	Toland	Ventura	1,200
Lopez (closed)	Los Angeles	4,000	Sunshine	Los Angeles	6,000
Bailard (closed)	Ventura	1,500			
San Marcos[a]	San Diego	3,000			
BKK (closed)	Los Angeles	13,200			
	Total	**27,700 tpd**		**Total**	**7,200 tpd**

[a] Due to close 3/11/97; may be extended.

project include 17 years at 850 tpd or 12 years at 1,200 tpd. A decision by the Riverside County Board of Supervisors has been postponed and is not likely to be rendered before the end of April 1997 on the proposed El Sobrante Landfill Expansion Project in Western Riverside County (an expansion from 4,000 tpd to 10,000 tpd, and from 8 million tons of capacity to 108 million tons of capacity).

In total, since the Draft EIS/EIR was published in July, 1996, there has been a decrease of 27,700 tpd of potential future landfill disposal capacity, and about 7,200 tpd of additional permitted capacity has been approved as a result of landfill expansions. As available waste disposal capacity decreases, the cost for disposal is likely to increase.

There are two other regional rail haul landfill projects that are in the permitting process. The Rail Cycle/Bolo Station Landfill Project in San Bernardino County is discussed on pages 2-70 through 2-71 of the Draft EIS/EIR. Since the Draft EIS/EIR was published, there has been no change in the permitting status and it is not clear at this time what schedule is proposed for pursuing approval of the Project.

The Mesquite Regional Landfill Project in Imperial County has received approval from Imperial County and the Bureau of Land Management. Appeals of a Superior Court ruling upholding the County approvals are pending at this time. The appellate review process may last from 12 to 14 months. The Project proponent must also obtain several remaining permits before construction and operation could begin in the event the trial court decision is upheld.

The Draft EIS/EIR analysis of landfill capacity requirements is based on the integrated waste management plans for each of the seven counties comprising the Project wasteshed. These county solid waste planning documents are the best available and most indicative data of the

region's disposal capacity needs. According to these documents, in the long term (1996 to 2050), approximately 1.3 billion tons of waste will require disposal from the seven-county region, and by the year 2050, the daily total disposal needs for the region could reach 105,000 tons. This is the equivalent of the daily disposal capacity limits of five to six developments of the size of the proposed Eagle Mountain Landfill Project.

The Draft EIS/EIR also reviewed waste disposal capacity in remote landfill sites (sites located outside the State of California) and noted that there was substantial uncertainty as to whether any of these remote sites could provide a dependable long-term amount of capacity for the seven-county region's disposal needs. The sites included the La Paz Landfill in Arizona; the Butterfield Station Landfill in Arizona; East Carbon Canyon Landfill in Utah; Columbia Ridge Landfill in Arlington, Oregon; and the Roosevelt Landfill in Washington.

The Draft EIS/EIR identified uncertainty as to whether any or all of the remote sites out of Southern California could provide a dependable long-term solution for the seven-county region's disposal needs on the basis of several factors: (1) the cost of transporting waste considerable distances to out-of-state landfills, which increases proportionally with the distance from Southern California; (2) the desire of many jurisdictions in Southern California to dispose of waste in-state; (3) the lack of direct rail access at some remote disposal sites (i.e., La Paz and Butterfield); (4) economic disincentives to out-of-state disposal, including export fees, flow control restrictions, and similar financial disincentives; and (5) potential political and/or environmental unacceptability of alternative remote disposal sites due to the less extensive environmental review accorded some out-of-state landfills compared to California's environmental review process for landfills.

Based upon the extensive review of the seven-county region's integrated waste management plans and information contained from other regional landfill site environmental impact analyses, the Draft EIS/EIR analysis concluded that by the year 2020 two or three rail haul disposal facilities (each with a waste disposal capacity of 20,000 tpd) could be required to meet projected disposal requirements. In the short term, at least one rail haul landfill facility will be needed to ensure that adequate alternative disposal-site capacity is available for jurisdictions in the seven-county region that will encounter a disposal capacity shortfall in the next 5 years.

7.2.2 General Response 2

Several commenters stated that the Draft EIS/EIR should have evaluated other proposed desert landfill sites as alternatives to the proposed Project. In response to the concern of several commenters that other potential desert landfill sites should have been considered in the alternatives analysis of the Draft EIS/EIR, this response summarizes the EIS/EIR analysis and conclusion that these other proposed sites are not true alternatives to the Project; rather, these sites should be, and have been, considered on the basis of their potential cumulative impacts with the Project.

The National Environmental Policy Act (NEPA) requires that an EIS contain an analysis of alternatives to the Proposed Action. The BLM's NEPA Handbook requires that an EIS

describe the No Action Alternative and all reasonable alternatives, including related monitoring requirements, to the same level of detail as the Proposed Action. The BLM Handbook also requires that an EIS identify alternatives considered but eliminated from detailed analysis.

The California Environmental Quality Act (CEQA) requires that an EIR describe a range of alternatives to the proposed Project, or to its location, that could feasibly obtain the Project's basic objectives. The EIR should include alternatives that could feasibly accomplish most of the basic purposes of the Project, and which could avoid or substantially lessen one or more of the significant effects of the Project. CEQA applies a "rule of reason," which requires that an EIR evaluate those alternatives that are necessary to permit a reasoned choice. The EIR must examine, in detail only, those alternatives that the lead agency determines could reasonably and feasibly attain most of the basic objectives of the Project.

The range and type of feasible alternatives that are required to be examined in the EIS/EIR depend primarily on the purpose and the objectives of the proposed Project. If a proposed alternative does not provide a reasonable and feasible option to achieve the Project's basic purposes and objectives, such a potential alternative can and should be eliminated from detailed consideration in the Draft EIS/EIR. Although a potential alternative cannot automatically be eliminated from detailed consideration because it does not fully achieve every element of the purpose and objectives of the Project, when a potential alternative does not substantially satisfy most of the central objectives of the proposed Project it can and should be eliminated from detailed consideration.

In the case of the Eagle Mountain Project, two of the primary objectives of the Proposed Action are to develop new Class III nonhazardous, municipal solid-waste landfill capacity for Southern California and to obtain economic benefits from Kaisers' former Eagle Mountain Mine Site. The EIS/EIR also specifies that the Project serves a number of additional purposes, including meeting the County's financial objectives to develop a long-term source of economic benefit and establishing an Environmental Mitigation Trust for acquisition of habitat for sensitive species.

Applying the principles from NEPA and CEQA, the alternatives considered in the Draft EIS/EIR of the proposed Project were determined to be: (1) No Action; (2) Reduced Volume of Onsite Disposal; (3) Alternate Road Access; (4) Rail Access Only, (5) Landfill on Kaiser Land Only; and (6) Landfill Development/No Townsite Development. Other potential alternatives that were considered but eliminated from detailed consideration were (1) landfill on other Kaiser Properties; (2) waste diversion; (3) offsite landfill locations; (4) landfill mining; (5) alternative townsite locations; and (6) alternative Townsite land use and densities. These potential alternatives were not analyzed in detail because they do not meet the basic objectives of the Project and/or are not within the jurisdiction of the County of Riverside.

Desert landfill proposals sponsored by others are not true alternatives because they do not meet several of the basic objectives of the Project, including development of an economically beneficial Class III landfill disposal site in the County of Riverside and reclamation of

Kaiser's abandoned iron ore mine. Additionally, landfill projects sponsored by others and proposed to be located elsewhere are not "feasible" alternatives within the meaning of CEQA or NEPA. For example, there are no reasonable means by which the Project applicant could obtain another landfill project's entitlement applications and real property interests because these properties are owned and controlled by other applicants.

In addition, the County of Riverside's legal jurisdiction does not extend to other counties; thus an additional factor in the elimination of other desert landfill sites from consideration as alternatives under CEQA because the County has no feasible means to exercise police powers to gain control of property owned and controlled by others outside of its jurisdiction.

Finally, the EIS/EIR discusses the long-term need for waste disposal capacity in the Southern California region, and the need for more than one regional landfill to provide this long-term capacity. Given the capacity shortfall projected for Southern California, more than one regional landfill would be necessary to provide disposal capacity.

Thus, the proposed regional landfills at other desert locations urged by commenters to be studied would, if approved, in some measure help address the Southern California region's long-term waste disposal needs, but they are not true "alternatives" to the proposed Project. As noted above, the sites are not mutually exclusive, and for this reason the EIS/EIR properly examines these sites in the context of their potential cumulative impacts. Reviewing these other landfill projects as reasonably foreseeable future projects presents a more conservative environmental analysis, because it discloses the aggregate of impacts from regional sites, whereas the alternatives analysis approach would treat the sites singularly and not provide that same type of analysis. This EIS/EIR discloses the full range of anticipated and potential impacts from the Eagle Mountain Project, individually as well as cumulatively, with other landfill projects.

7.2.3 General Response 3

A number of commenters expressed concerns about potential impacts to Joshua Tree National Park (JTNP), and the standards against which the significance of the potential impacts was evaluated.

7.2.3.1 Agreement Between National Park Service and Kaiser/Mine Reclamation Corporation

Throughout the environmental analyses for this Project and preparation of the EIS/EIR, Kaiser/Mine Reclamation Corporation (MRC) and the National Park Service (NPS) have discussed the potential impacts of the Project upon JTNP. Notwithstanding the mitigation measures proposed in the EIS/EIR, JTNP believes that the location of the Project in relation to JTNP has the potential to cause unknown or unpredictable long-term impacts or intrusions to JTNP's resources and to place an additional funding burden on NPS to develop new scientific information, to undertake research, and to implement additional efforts to monitor and address possible impacts associated with the Project.

On December 9, 1996, the NPS and Kaiser/MRC executed an Agreement effective upon completion of the land exchange (Appendix T). The Agreement details contractual obligations and funding mechanisms that would be undertaken if the landfill is authorized to proceed. The NPS states in the Agreement with Kaiser/MRC that with the implementation of these contractual obligations and considering the responses to comments of the NPS, the EIS/EIR is a "complete analysis of the known effects of the Project upon the environment." Further, the NPS states that the proposed measures, if implemented, would "reduce the known effects of the Project on the Park (except for the potential effects on the wilderness experience) below the levels of significance required by CEQA." These measures are incorporated in the Final EIS/EIR in the Mitigation Monitoring and Reporting Program (Appendix M).

In the Agreement, Kaiser/MRC also recognizes the NPS's concerns about the Project, and provides additional measures to protect and preserve resources of JTNP in the event that the Project is authorized to proceed.

In addition, the Agreement provides that funds from the Environmental Mitigation Trust (as required by the U.S. Fish and Wildlife Service (USFWS) and funded by the Project) will be used to monitor and, if necessary, mitigate long-term impacts.

This Trust, which would be administered by the County of Riverside, directs how the funds are to be used. The Trust is described in greater detail in the response to General Comment 6.

7.2.3.2 Standards of Significance

Chapter 4 of the EIS/EIR defines measures of significance of environmental impacts for each potential impact area. Both CEQA and NEPA rules require that the significance of impacts be evaluated. CEQA and NEPA provide guidance about how significance should be defined for particular impacts, and this guidance was used in the Draft EIS/EIR. In addition, certain laws and regulations establish objective standards to be used in determining the significance of particular impacts, which were followed in the Draft EIS/EIR. Where laws or regulations have not established such objective criteria for other potential impacts, the appropriate federal, state, and local agencies were consulted in formulating standards of significance. In so doing, significance criteria were developed using conservative assumptions. Although some of the standards address classes of resources differently (e.g., noise criteria for all wilderness areas are more stringent than for nonwilderness areas), the criteria for assessing impacts and the methods used to assess impacts were applied uniformly to similar resources administered by the BLM, the NPS, and other land owners in the vicinity of the proposed Project.

7.2.3.3 Potential Impacts to JTNP

Prior to entering into the Agreement discussed above, the NPS has commented on the Draft EIS/EIR (see Response to Comments 1A to 1G and 1-1 through 1-182 of this EIS/EIR). JTNP and other commenters stated concerns about impacts to the park, and stated opposition

to the development of the Project because of its proximity to the Park. The following text provides a summary of the impacts attributable to the proposed Project that were raised in the comments.

Biological Impacts. General Response 6 addresses biological impacts, including biological impacts within JTNP.

Windblown Debris. Certain commenters raised concerns that an increase in windblown debris and litter may increase the number of predators in the area. Other commenters raised concerns about debris and litter leading to a release of nutrients that might adversely impact the desert ecosystem. These concerns are addressed in General Response 6, below.

Litter will be controlled by the applicant, MRC, through waste compaction and daily soil cover. The active working face of the landfill will be limited to no more than 2 acres at a time. Portable litter fences will be installed around all active landfill and waste handling areas and will be regularly patrolled. If winds increase, the number of litter patrol personnel will be increased; if winds are strong enough that even additional litter patrol workers cannot control litter, the working face will be covered with soil, and operations will be suspended until winds are calmer.

To control conditions at the Townsite that could also lead to an increase in predators, measures identified for predator control will also be employed at the Townsite. These measures will include educating Townsite residents of the factors that increase raven and other predator populations, and restrictions requiring disposal of trash and garbage only in tightly closing trash receptacles. Areas around businesses will be patrolled regularly to collect trash. Feeding domestic animals outside in areas accessible to ravens will be prohibited. Buildings and other structures that could provide nest sites for ravens will be monitored regularly.

MRC has committed to a "zero tolerance" policy for litter impacts to JTNP. Litter control measures will be jointly evaluated by MRC, the BLM, and NPS. If litter from the Project is found within JTNP, litter will be removed using a method approved by the NPS. Additional feasible measures will be identified and implemented, if necessary. With the implementation of the litter control measures identified in the EIS/EIR, the potential for litter to affect JTNP will be below the level of significance.

Dust. Several commenters questioned whether regional visibility could be affected by emissions of different particulates into the air. Potential dust impacts to JTNP are addressed in General Response 7 below.

Visual Resources. Several commenters questioned whether the landfill would constitute a significant visual impact to users of JTNP and other wilderness areas.

A number of the comments that address the visual impact of the landfill primarily focus on the appropriateness of the visual assessment methodology used in the Draft EIS/EIR. The BLM methodology was used because the NPS does not have its own recognized visual

assessment methodology and the BLM, as the lead federal agency for the EIS, uses a methodology that is one of several visual resource assessment methodologies used and accepted by federal agencies. Applying that methodology, a visual contrast rating for the existing disturbed area of the Kaiser mine site and the surrounding landscape was developed, and then a visual contrast rating for the proposed Project and the surrounding landscape was developed. These contrast ratings were developed from eight Key Observations Points (KOPs) selected in consultation with the NPS.

The BLM methodology uses a weighted quantitative scoring of four basic visual elements: color, form, line and texture for each of the major landscape features. Color, not form or line, was given the most weight because color creates the highest visual contrast between the mine or the Project and the surrounding landscape. Also, in the BLM methodology, the number of viewers is only one factor of several used to assign sensitivity ratings and to assess impacts. For example, views from JTNP were assigned the highest sensitivity level based on viewer expectations.

Using the BLM methodology, the analysis indicates that during the early stages of operations, the landfill would slightly improve the visual quality of the site, except to viewers at higher elevations in the Eagle Mountains within the border of JTNP. This is because the landfill would generally cover areas previously disturbed by mining that have an equal or greater contrast, without becoming a dominant landform or blocking the view of the mountains. During the latter stages of operations and after final closure, the visual contrast rating for the Project is moderate after implementation of two important mitigation measures. First, the color of the landfill—the critical visual element for this site—will be made similar to the surrounding landscape through use of similarly colored cover soil. Second, the visual contrast of the landfill's form and line will be reduced by making the final contours more irregular and less even to the extent possible. Thus, when compared to the existing disturbed mining site, the Project's visual impacts are not considered to be significant.

Nighttime Lighting. Some commenters also questioned the determination in the Draft EIS/EIR that the Project would not cause a noticeable increase in nighttime lighting evident for viewers in JTNP. To respond to this concern, an additional field analysis of potential nighttime lighting impacts was prepared for the Final EIS/EIR (Appendix W). This additional analysis first measured existing nighttime light at points within JTNP and at other locations near the Project site. Next, nighttime light from the Project was estimated and compared with existing conditions to determine the likely impacts attributable to the Project. The analysis showed that within JTNP, while direct views toward the Project would include vehicle and equipment headlights and light at the waste receiving areas (until operations close at 10:00 p.m.), these views are already affected by lights visible from, among other places, the community correctional facility; and there would be no increase in light levels that would be measurable from within JTNP. Because cutoff-type lights would be used exclusively, the Project would not increase the amount of light directed upward above the plane of the light. There would, however, be a minor increase in the amount of light reflected from the ground surface. This minor increase in "skyglow" could be visible from the areas of the JTNP

boundary and areas adjacent to the Project site, but would not be noticeable from beyond approximately 2 miles and from the more heavily used areas of JTNP located to the west.

The Wilderness Experience. Section 4.11 of the Draft EIS/EIR evaluates the Project's potential impacts to, among other things, the "wilderness experience." This analysis discusses two components of wilderness—wilderness resources and an individual's wilderness experience. Wilderness resources are defined as a distinct resource with component parts (e.g., air, water) that interact as a single ecological unit. Potential impacts to wilderness resources are defined to include the range of potential impacts associated with the physical resources comprising wilderness areas. These physical impacts are discussed throughout Section 4 under the resource topic headings. The wilderness experience is defined in terms of the personal experience of individuals in a setting of solitude, and the analysis focuses on the sensory experience of an individual using wilderness resources. The Draft EIS/EIR concludes that the Project's potential impacts on this matter could not be reduced to a level of insignificance.

Certain commenters questioned the Draft EIS/EIR's conclusion that the impact to the wilderness experience is not quantifiable or objectively measurable. For example, NPS initially suggested using its analysis known as "Vision Experience and Resource Protection" (VERP). NPS uses the VERP process to make internal park-specific management decisions. A critical element of the VERP process is data derived from interpretations by park managers of visitor use perceptions in the context of specific park management objectives. After consulting with NPS about the applicability of the VERP process, JTNP stated that the VERP process is not an appropriate process for evaluating the significance of the Project's impacts on the wilderness experience.

JTNP Boundaries. In preparing the Draft EIS/EIR, all previous comments submitted by the NPS on the Administrative Draft EIS/EIR were reviewed and considered. Several commenters questioned the currency and accuracy of maps contained in the Draft EIS/EIR. In several meetings with NPS and JTNP staff during the preparation of the EIS/EIR (February 22, 1995; July 21, 1995; January 22, 1996), JTNP staff stated that the DOI maps, which form the basis for those used in the Draft EIS/EIR, were the most recent, accurate maps depicting the JTNP boundaries. It is also noted further that, to date, neither NPS nor JTNP staff has provided revised or more current maps for inclusion in the Draft EIS/EIR. Representatives from the NPS stated in February 1995, that they are in the initial stages of working with the BLM and the Metropolitan Water District of Southern California (MWD) to develop a legal definition of the new boundaries of JTNP and that NPS staff are working with BLM's surveyors to identify and eliminate all boundary errors. The NPS stated that after these quality control measures are completed, the boundaries will be submitted to the Department of the Interior in Washington, D.C., for approval.

7.2.4 General Response 4

Several commenters questioned aspects of the proposed land exchange. The following sections address specific comments of concern related to the land exchange.

The proposed land exchange and right-of-way grants for the Project are described in Section 1.2.4 (Federal Role) and in Section 2.1 (Proposed Action) of the Draft EIS/EIR. To address comments concerning the proposed land exchange and right-of-way grants, this General Response summarizes the key features of these proposed actions and then responds to a variety of specific questions and concerns.

In the proposed land exchange, BLM would convey to Kaiser approximately 3,481 acres of public land plus BLM's reversionary interest in an approximately 461-acre parcel known as the Kaiser campsite (collectively, the "Selected Lands"). All of the Selected Lands are located within the Project site, and a substantial portion of them have been severely disturbed by past mining operations. In addition, a substantial portion of the Selected Lands are subject to unpatented mining claims held by Kaiser. In return for these lands, Kaiser would convey to BLM approximately 2,846 acres of land containing sensitive habitat currently owned by Kaiser (the "Offered Lands"). The Offered Lands are located adjacent to the Eagle Mountain Railroad, outside the Project site itself, and provide habitat for sensitive species such as the desert tortoise and the desert pupfish. The Selected and Offered Lands are depicted in Figures 2-1, 2-2, and 2-3 in Section 2.1.1 of the Draft EIS/EIR.

In addition to the land exchange, the Project proponents have applied for two right-of-way grants. The first right-of-way is for approximately 28.6 miles of the 52-mile Eagle Mountain Railroad line, which would be used by trains traveling to and from the Project site. This right-of-way would be issued pursuant to the Federal Land Policy and Management Act of 1976 (as amended), and would replace an existing right-of-way that was issued pursuant to Private Law (PL) 790. The second right-of-way is for approximately 6.75 miles of Eagle Mountain Road, which would be used by trucks traveling to the Project site. This right-of-way also would be issued pursuant to FLPMA, and would be held jointly by Kaiser and the Metropolitan Water District. Both rights-of-way would be issued subject to terms and conditions imposed on their use by BLM, including mitigation requirements. The rights-of-way are described in more detail in Section 2.1.2 of the EIS/EIR.

The following responses address specific concerns raised by commenters with respect to the land exchange and rights-of-way:

7.2.4.1 Kaiser Ownership and Control of Project Lands

Commenters inquired about the extent of Kaiser's vested mining rights and land ownership at the Project site. As discussed in the Draft EIS/EIR, the Project site consists of lands owned in fee by Kaiser (i.e., patented lands plus other lands owned by Kaiser), BLM-administered lands that are subject to unpatented vested mining and mill site claims held by Kaiser, and other BLM-administered lands (see, for example, Draft EIS/EIR Sections 1.2.4 and 2.1 and Figure 5-13). Approximately 2,071 acres of the Landfill Specific Plan area are owned by

Kaiser in fee, and approximately 1,685 acres of the Landfill Specific Plan area are located on vested mining and mill site claims held by Kaiser.

7.2.4.2 Status of Lands Along the Eagle Mountain Rail Line and Rights-Of-Way

The land ownership and rights along the Eagle Mountain Railroad are described in detail in Section 2.1.2.3 of the Draft EIS/EIR. The existing right-of-way from the BLM covers approximately 28.6 miles of the 52-mile rail line; the remainder of the rail line traverses lands that are currently owned by Kaiser, and other federal agencies and private landowners which have issued easements or other permits to Kaiser for the rail line.

7.2.4.3 Reversionary Interest of the United States

The reversionary interest of the United States in the approximately 461 acres patented to Kaiser in 1955 under PL 790 is discussed in Section 2.1.1.3 of the Draft EIS/EIR ("Reversionary Interest in Townsite Area and Rights-of-Way") and in a Department of Interior Regional Solicitor's Opinion contained in Appendix O. As stated in the Opinion, "The surface estate will not revert to the United States automatically, but would only revert upon the election of the Secretary [of Interior], based upon a finding that the facts support the applicability of the reversionary clause..." The BLM has determined that the reversionary interest under PL 790 has not been triggered. Furthermore, as noted in the Regional Solicitor's Opinion, control of the reversion rests with Kaiser because Kaiser can prevent the reversion by using the property for mining-related purposes. Thus, if the Project does not go forward, the campsite and the railroad right-of-way (i.e., the lands on which the United States retains a reversionary interest) could remain in Kaiser's ownership. As a result, these lands would not necessarily revert to the United States if the Project does not go forward.

The activity allowed on the Kaiser campsite and railroad right-of-way are governed by the terms of Private Law 790. This law was interpreted by the Solicitor's Office in the legal opinion of February 3, 1993, and was determined that "Kaiser's lease of a portion of the property for the operation of a correctional facility was within the rights granted to Kaiser by the patent [under Private Law 790]." Kaiser has not developed plans for the use and/or development of the Project site in the event that the No Action alternative is selected. Kaiser would be entitled to continue mining or mining-related activities in its discretion.

7.2.4.4 Current Ownership and Use of the Offered Lands to be Conveyed to the BLM

Commenters inquired about the current ownership and use of the offered lands that are proposed to be conveyed to the BLM as part of the BLM/Kaiser land exchange. The Offered Lands are currently located in areas designated as Desert Areas or Mountain Areas under the County's General Plan and zoned as W-2, W-2-10. Because the Offered Lands are owned entirely by Kaiser, they are not currently under the jurisdiction of the BLM, and the use of those lands, including the portions of the Offered Lands which abut the Eagle Mountain Railroad, is not currently restricted by the BLM. If the land exchange is approved, the Offered Lands will be managed by the BLM in accordance with the California Desert

Conservation Area Plan and any applicable management plans, activity plans, and habitat plans thereunder. The Offered Lands were acquired by Kaiser over time since the opening of the mine, and are not subject to any reversionary interests.

7.2.4.5 Determination of the Economic Value of the Offered Lands

Commenters inquired about how the economic value of the offered lands was derived. As referenced in the Draft EIS/EIR (see, e.g., Section 2.1.1), the land exchange must be made in accordance with the requirements of the Federal Land Policy and Management Act of 1976 (as amended) and implementing regulations, which include the requirement of an appraisal of both the Offered and Selected Lands. As indicated in the Draft EIS/EIR, appraisals were previously performed on the Offered and Selected lands, and those appraisals have been updated. Kaiser owns the approximately 461 acres in and around the Townsite covered by PL 790, subject to a reversionary interest of the United States in that land. As part of the land exchange, all reversionary interests would be conveyed from BLM to Kaiser. Pursuant to BLM's instructions, both the original and the updated appraisal valued the reversionary interest being conveyed from BLM to Kaiser as a fee simple interest (exclusive of Kaiser-owned and -financed improvements). Thus, if the land exchange is completed, the value assigned to the Selected Lands being transferred from BLM to Kaiser would be much higher than would typically be the case if the interest being conveyed were valued merely as a reversionary interest. A Summary of Updated Appraisals is located in Appendix V of the Final EIS/EIR. The new appraisals prepared by an independent appraiser selected by the BLM value the Offered Lands at $296,500.

7.2.4.6 Resource Value of Offered Lands

Commenters asked how the Offered Lands were selected for the exchange and asked for a description of resources, including biological resources, on the Offered Lands. The Offered Lands comprise nonmining lands that are owned by Kaiser east of Chiriaco Summit in Riverside County.

As described and depicted in Sections 2.1.1.2, 3.5, and 3.11 of the Draft EIS/EIR, the Offered Lands include lands within the boundaries of the Chuckwalla Bench and the Salt Creek Areas of Critical Environmental Concern. The Offered Lands are intended to, among other factors, promote the consolidation of federal ownership of environmentally sensitive lands and support the BLM's efforts to promote biodiversity. The mitigation measures for the proposed Project include the requirement that Kaiser provide to the BLM 400 acres of desert tortoise habitat as direct mitigation for the loss of 160 acres of desert tortoise habitat from Project implementation (see Section 4.7.3.3 of the Draft EIS/EIR). Also, the Environmental Mitigation Trust fund will provide funds for the acquisition and protection of other lands with high ecological or wilderness values. The proposed land exchange will enhance the protection of the Offered Lands by minimizing the potential for development. Without the proposed land exchange, the restrictions on developing these privately owned lands are less than if the land exchange is approved and the federal government obtains unfettered control of the lands. After the Offered Lands are transferred to the United States Government, protection of the these lands is anticipated to be the primary objective for their management.

In addition to the biological resource values of the Offered Lands, the EIS/EIR discusses effects on specific resources, including Public Health and Safety (Section 4.2); Traffic and Transportation (Section 4.3), associated with the rail traffic along the Eagle Mountain Railroad (i.e., through the Offered Lands).

7.2.5 General Response 5

Several commenters on the EIS/EIR questioned the adequacy of the document's discussion regarding the landfill composite liner system, and the ability of the system to withstand seismic events. The Draft EIS/EIR has relied on thorough geologic, seismic, and hydrogeologic site investigations and expert opinion and conclusion, summarized below and referenced in detail in the Draft EIS/EIR, to evaluate the performance and reliability of the composite liner system proposed for the Project. The composite liner system evaluated in the Draft EIS/EIR was designed specifically for the site based on the information and data obtained in the site investigations. In connection with the evaluation of the liner system, the Draft EIS/EIR identified potential impacts to groundwater and required installation of the liner system as proposed with other mitigation measures as required by CEQA. The Draft EIS/EIR determined that with the implementation of mitigation measures, including the liner system, the potential for groundwater impacts would be mitigated to a level below significance. The basis for the Draft EIS/EIR discussion of the liner system performance and the ability of the liner to withstand seismic events is set forth below.

The purpose of a composite (geosynthetic and clay) liner system is to contain landfill gas and leachate (water or liquid coming into contact with the solid waste) within the waste management unit, and to prevent the escape or release of the leachate and/or landfill gas to the environment. The Draft EIS/EIR notes that the Eagle Mountain Landfill will generate very little, if any, leachate due to the arid climate, low average annual rainfall (fewer than 4 inches), and anticipated relatively low (21 percent) moisture content of the incoming waste. The active landfilling (working face) area of the landfill will be kept to approximately 2 acres or less, reducing the potential for rainfall infiltration during infrequent, but heavy desert rainstorm events.

The composite liner system is designed to prevent escape of any leachate and/or landfill gas to groundwater. With regard to leachate, a key feature of a composite liner is to keep any liquid off the geosynthetic membrane liner to limit the potential for leakage. A leachate collection and removal system, using coarse permeable gravel, above the composite liner to drain leachate from the landfill before it reaches the liner system. The leachate is drained to a collection point where it is then removed. The capacity of the leachate collection and removal system was designed to be much larger than required by regulation, particularly given the arid climate and low potential for leachate generation. Leachate removal prevents the build-up of leachate hydraulic head pressure on top of the composite liner. Below the base composite liner is a *secondary* composite liner consisting of a high density polyethylene (HDPE) liner and geosynthetic clay liner to provide additional protection against the escape of leachate. The Draft EIS/EIR (at page 4.1-11) references and summarizes the field studies and expert analyses regarding the long-term performance capabilities and durability of

composite liner protection systems, which have been proven to be highly effective in containing leachate and preventing groundwater impacts from other landfills.

The landfill will naturally produce landfill gas as a by-product of the microbial waste decomposition process within the landfill. The composite liner acts as a barrier to prevent migration of landfill gas from the bottom and sides of the landfill. In addition, the landfill design incorporates an active landfill gas collection and recovery system to remove landfill gas from the landfill. The landfill design also incorporates a vadose zone gas monitoring system beneath the landfill as a secondary containment system and early warning detection system. These added monitoring systems exceed regulatory requirements for landfill gas monitoring at municipal solid waste landfills in California.

The composite liner system developed for the Project and evaluated in the EIS/EIR is designed to meet or exceed state and federal seismic design requirements. The Draft EIS/EIR (Section 4.9) notes that the Project site is east and outside of the areas of high historical seismicity in Southern California. Notwithstanding the limited historical seismicity at the Project site, the landfill liner system is designed to withstand seismic shaking from large earthquake events. The Draft EIS/EIR evaluated the ability of the liner system to withstand seismic shaking, which is summarized in Section 4.9.3 with detailed references and analysis provided in Appendix H of the Draft EIS/EIR. As is noted in the Draft EIS/EIR, state and federal regulations for seismic design of landfills are significantly more stringent than seismic standards for commercial and residential structures.

Although the Eagle Mountain site lies east of the zone of historically high seismicity in California, the Draft EIS/EIR evaluated the performance of existing landfills with and without composite liners in the California coastal zones subject to seismic activity, particularly focusing on the 1994 Northridge earthquake. Evaluations of landfills in proximity to the epicenter of the Northridge earthquake (including the Sunshine Canyon Landfill and the Lopez Canyon Landfill) showed no earthquake-induced damage to landfills or structures that resulted in a release of waste or leachate to the environment. The primary impact of the quake's strong ground motions was the cracking of cover soils and temporary disruption of landfill gas collection systems. Observations of two landfills with geosynthetic composite liner systems, Lopez Canyon and Bradley Landfills, provided clear evidence that a composite liner system constructed to federal and state Subtitle D standards can withstand strong earthquake-induced ground shaking without any damage that would result in environmental impact or damage to resources.

The Draft EIS/EIR analysis concluded that the Eagle Mountain Landfill liner system would withstand a major seismic event based on the following factors: the location of the Project outside the area of historic high seismicity; the absence of active faulting at or near the Project site; a conservative technical design to meet the prescriptive regulations in Subtitle D, as well as site-specific requirements under California regulations; and evaluations of the performance of landfills with and without composite liners after strong seismic events, notably the 1994 Northridge earthquake. The seismic design and evaluation, including the site faulting investigations, are summarized in the Draft EIS/EIR at Sections 2.0, 4.1, and 4.9, and are detailed in Appendix H of the Draft EIS/EIR, as well as the Report of the Waste

Discharge filed with the Regional Water Quality Control Board (RWQCB) (referenced in the Draft EIS/EIR).

The landfill will be secured with a final cover consisting of compacted soil material and flexible HDPE-type geomembrane, along with an erosion protection layer. The landfill final cover will be installed progressively as the landfill is developed, thus providing an additional means to prevent generation of leachate from rainfall.

The landfill will also be subject to state and federal groundwater monitoring requirements, and will include a vadose (unsaturated) zone monitoring system located below the primary composite liner and above the secondary composite liner. The Draft EIS/EIR describes the groundwater monitoring well system in detail, including the basis for well placement based on site-specific hydrogeologic subsurface investigations. The Draft EIS/EIR also describes the technical analysis and design for monitoring the fractured bedrock beneath the site, which has been extensively studied through a number of hydrogeologic investigations.

The vadose zone monitoring system, which lies directly below the primary composite liner, will enable the early detection of any leachate release before such leachate could impact the groundwater. The vadose zone system also includes gas monitoring, not required by state or federal regulations.

The Draft EIS/EIR also includes a Technical Advisory Panel (TAP) report prepared by a panel of experts who independently evaluated the landfill project and the composite liner system, concluding that the primary and secondary composite liner systems represent the state-of-the-art and are safe, reliable, and durable for long-term performance. In addition, the TAP evaluated slope stability and seismic design, and concluded the design would be stable and withstand seismic shaking. The TAP report is provided in the Draft EIS/EIR at Appendix C-2. The basis for the Draft EIS/EIR analysis and conclusions regarding groundwater quality impacts are set forth in Sections 3.1, 3.9, 4.1, and 4.9 of the Draft EIS/EIR, and in more detailed information provided in Appendix C to the Draft EIS/EIR, as well as the Report of Waste Discharge submitted to the RWQCB, referenced in the Draft EIS/EIR and Appendix C.

7.2.6 General Response 6

Several commenters questioned the Draft EIS/EIR's conclusions regarding biological impacts and proposed mitigation measures. In order to assess the biological impacts attributable to the Project, a review of various environmental documents and literature was undertaken and a number of field surveys were conducted. Over 2 dozen federal, state, and contracted environmental documents were reviewed. Literature concerning federal and state special species was also analyzed. Extensive field surveys of the Project site and the vicinity were conducted in 1989 and 1990 in connection with the previous EIS/EIR. These surveys are discussed in the Draft EIS/EIR in Section 3.7 and Appendix G. In order to update these surveys, additional field surveys were conducted in 1995 and 1996. The results of these surveys are in Appendix G.

7.2.6.1 Field Surveys and USFWS Biological Opinion

Several commenters noted that the more recent biological surveys identified additional species present in the Project area, including 15 additional bird species and 23 additional plant species, among which were two species that were previously classified as Category 2 candidates *(California Ditaxis and Las Animas Columbrina).* Category 2 species are those for which information is currently being collected to see if the species should be listed as threatened or endangered.

In February 1996, the "Category" status was eliminated. The status of the existing Category 2 candidates discussed in the EIS/EIR were changed to either "Candidate" or "Species of Concern" (*Federal Register*, February 28, 1996). Both of these reclassifications are defined as species that need further biological research and field study to resolve their conservation status. Neither the "Candidate" nor the "Species of Concern" are afforded regulatory protection status under the Endangered Species Act. The status of both of the former Category 2 candidate plant species discussed in the EIS/EIR was changed after February 28, 1996, to Species of Concern. The description of the status of these species and others has been changed in the Final EIS/EIR to reflect the *Federal Register* notice.

As a result of the removal of the Category 2 status for select plant and wildlife species addressed in the EIS/EIR, there is no requirement for protection of these species, including the mitigation measures currently included in the EIS/EIR. These mitigation measures, however, have been retained, resulting in greater protection than is required by existing environmental regulations as a result of reclassification.

Several commenters also raised the need to reinitiate consultation with the USFWS and issue a new biological opinion. The USFWS was asked to consider whether Section 7 consultation must be reinitiated. In a letter dated September 30, 1996 (in Appendix O of the Final EIS/EIR), the USFWS determined that there is no need to reinitiate consultation relative to Section 7 of the Endangered Species Act.

7.2.6.2 Potential Impacts to Species Listed in Draft EIS/EIR and Mitigation Measures

Commenters raised concerns about the analysis of the biological impacts contained in the Draft EIS/EIR. These comments, which focus on impacts to bighorn sheep, bats, desert tortoises, pupfish, and certain cacti, are discussed below.

Nelson's Bighorn Sheep. The Draft EIS/EIR discusses the potential for losses of individual Nelson's bighorn sheep to train kills and the potential for fragmentation of habitats and populations on page 4.7-12, with mitigation described on page 4.7-29 and 4.7-30. The Final EIS/EIR has been clarified to indicate that the average train speed for trains going toward the site would be 20 miles per hour (mph), and the average speed for trains leaving the Project site would be 40 mph.

Mitigation for impacts to Nelson's bighorn sheep is described on pages 4.7-29 and 4.7-30 of the Draft EIS/EIR. Additional mitigation details have since been developed in consultation with the CDFG. Key among the mitigation measures included in the Project design is the establishment of a 644-acre buffer zone that includes habitat for this species. Four permanent water sources will be established, two near the Project site at locations recommended by CDFG and two along the rail spur south of Interstate 10 at locations to be determined with CDFG and NPS biologists. Water sources will be filled by MRC if natural runoff is insufficient to maintain them. The tanks will be designed in conjunction with CDFG. There will be a "four-time" replacement requirement so that the water sources will be functional throughout the life of the Project. Domestic livestock, including cattle, sheep, swine, and goats, will not be permitted to be kept at the Townsite to prevent the transmission of diseases that may affect the Nelson's bighorn sheep. All domestic dogs will be required to be restrained and controlled at the Townsite to prevent them from harassing or killing sheep. In addition, bighorn sheep use the entire Eagle Mountain range, and would use newly located water sources without being translocated. (Divine and Douglas 1996; Appendix N.)

California Leaf-Nosed Bats. Mitigation for impacts to bats is described on page 4.7-29. Revised mitigation measures have since been developed in consultation with CDFG. Extension of the Kaiser Eagle Mountain Mine adit is not currently proposed because of the CDFG's opinion that this measure would not likely succeed. Instead, the Black Eagle Mine adit will immediately be opened to create a potential alternative winter roost site for the California leaf-nosed bat. The opening of this adit will be gated with a CDFG-approved bat gate and the success of this mitigation will be monitored by a CDFG-approved biologist. In addition, should monitoring at the Kaiser Eagle Mountain Mine and Black Eagle Mine adits indicate that bats are abandoning the Kaiser Eagle Mountain Mine adit and not recolonizing the Black Eagle Mine adit, a new adit will be constructed that provides suitable environmental conditions for California leaf-nosed bats at a location to be determined in conjunction with appropriate resources agencies.

Desert Tortoises. The Draft EIS/EIR fully analyzed the impacts to desert tortoise from the railway and the road bisecting the tortoise habitat and located within the Chuckwalla Unit. Mitigation for impacts to this species is described on pages 4.7-20 through 4.7-28 of the Draft EIS/EIR.

Among these are mitigations that are consistent with the management actions recommended in the Recovery Plan, including restricting train traffic and constructing certain barrier fencing. In addition to recommendations identified in the Recovery Plan, proposed mitigation to reduce or avoid loss of tortoises from reactivation of the railroad includes placement of ballast within railroad tracks to facilitate movement of tortoises from between the tracks, and a survey of tracks prior to each train trip from February 1 to October 31 to remove tortoises from the tracks prior to train passage. This mitigation will allow safer passage than currently exists and will allow tortoises access to habitat on both sides of the tracks throughout the life of the Project. Additionally, the Environmental Mitigation Trust would be used, in part, to acquire and protect private inholdings that provide tortoise habitat (and habitat for other species) within these two Desert Wildlife Management Areas, thus reducing potential habitat fragmentation for tortoises and other species.

These mitigation measures have been discussed with California Department of Fish and Game (CDFG), and the Final EIS/EIR has been revised to indicate that CDFG will be included as a full partner with the NPS and the BLM in the approval of the location of the 400 acres of tortoise habitat on the Chuckwalla Bench intended to mitigate the loss of 160 acres of habitat resulting from improvements to Eagle Mountain Road and its extension. In addition, as noted earlier in this General Response, raven control measures will also be implemented at the Townsite.

Several commenters questioned the conclusions of the analyses regarding the efficacy of tortoise mitigation measures that are summarized in Section 4.7.3.4 and presented in Appendix G of the Draft EIS/EIR.

In response to the Court's determination that the previous EIR did not provide substantial evidence to support the conclusion that the mitigation measures will be effective in reducing the risks to the desert tortoise, a review and analysis was conducted of 263 projects that have been authorized in desert tortoise habitats by the USFWS under 234 federal Biological opinions, to determine the efficacy of terms, conditions, and other mitigation measures in protecting tortoises, particularly during construction and operation phases.

It should be noted that to date, five regulatory documents have identified measures to protect desert tortoises for the Eagle Mountain Project, including the Biological Opinion, a California Department of Fish and Game 2081 Permit and 1603 Streambed Alteration Agreement, the 1992 EIS/EIR, and the 1993 BLM Record of Decision (ROD). The Biological Opinion for the Project includes all mitigation measures for desert tortoises included in all the other regulatory documents, with the exception of a 35-mph speed limit on Eagle Mountain Road, which was included only in the Project's 1993 ROD. Therefore, analysis of the efficacy of the measures required by the Biological Opinion includes almost all such measure identified to date.

The Biological Opinion for the Eagle Mountain Project includes 9 "core conditions" that are typically found in other Biological Opinions, and 12 additional conditions, which are more specific to the Eagle Mountain Project. The analysis of 234 Biological Opinions found that the 9 core conditions are also found in the majority of Biological Opinions for other projects; 8 of the remaining 12 conditions are occasionally found in other Biological Opinions, and 4 are unique to the Eagle Mountain Project. The 234 Biological Opinions were reviewed to determine whether the conditions they required addressed long-term impacts; the similarity of the conditions required by these other Biological Opinions and the Eagle Mountain opinion suggest that these measures will be effective in the long-term.

The analysis of the 234 Biological Opinions indicates that for the 263 projects covered by these Biological Opinions, tortoise mortality was only 5.4 percent of what was allowable by the USFWS in the Biological Opinions. Even if tortoise mortality had been 100 percent of that allowed by the USFWS, that level of mortality would not be considered by the USFWS to jeopardize the tortoise.

Desert Pupfish. The Draft EIS/EIR discusses the potential for impacts to the desert pupfish associated with rail accidents and construction and identifies mitigation measures (pages 4.7-3 and 4.7-4 and 4.7-16 through 4.7-19). With these mitigation measures in place, significant impacts to the desert pupfish are not anticipated, as was confirmed by the Biological Opinions prepared by the USFWS (USFWS, 1992, 1993).

Mitigation measures are identified in the Draft EIS/EIR (pages 4.7-16 through 4.7-19). The details of these mitigation measures have been discussed with CDFG, and the Final EIS/EIR has been revised to indicate that CDFG would determine the source of the individual pupfish collected for establishing the population at the proposed Deep Canyon Reserve.

Alverson's Foxtail Cactus. Since the Draft EIS/EIR was published, the results of an experiment in transplanting Alverson's foxtail cactus at the Project site have become available. These results indicate 100 percent survival of transplanted individuals 2 years following transplant. Additionally, 95 percent of these transplanted individuals have flowered following transplanting. Based on these results, additional mitigation for Alverson's foxtail cactus is proposed to include the collection of seed from transplanted individuals. Seed will be stored under appropriate temperature and humidity at the Department of Biology, University of California, Riverside, or similar institution. The survival of transplanted individuals will be monitored for 5 years following transplanting.

California Barrel Cactus. The Final EIS/EIR has been modified to clarify that approximately 600 individual of this species would be lost over the approximately 100-year life of the Project, rather than at one time. Mitigation will include transplanting individuals located within the area included in the active phase of the Project as the Project proceeds through each phase. These transplants would occur according to procedures acceptable for transplanting cacti. During the reproductive season prior to transplanting, seeds from individuals to be transplanted will be collected and stored under appropriate temperature and humidity at the Department of Biology, University of California, Riverside, or similar institution. Survival of transplanted individuals will be monitored for 5 years following transplanting.

7.2.6.3 Potential Impacts to Additional Species

Some commenters questioned if the proposed Project would cause significant impacts on species other than those identified in the Draft EIS/EIR (i.e., mountain lions, lizards, owls, and scrub jay). As described below, no such impacts are expected to occur.

Mountain Lion. Section 3.7 of the Final EIS/EIR has been revised to indicate the presence of a single mountain lion, that is known (based on sightings near the community correctional facility and pug marks at the well) to include the Project area in its territory. Approximately 1,038 acres of habitat that are likely included in the resident mountain lion's home range are included in the landfill footprint. An additional 644 acres will be retained in a zone surrounding the landfill area to buffer wildlife from landfill activities. Some actual loss of habitat would occur, along with a reduction in the value of remaining habitat in the buffer area. The size of home range for mountain lions is from 25 to 35 square miles for males and

a somewhat smaller area for females (Nowak and Paradiso, 1984). The loss of approximately 1,000 acres (approximately 1.5 square miles) of available habitat is considered a less than significant impact to the individual mountain lion that occupies this area, given the large home range of this animal. While impacts to the mountain lion are not expected to be significant, the special emphasis on mountain lion protection established by Proposition 117, Section 6, is reason to recommend that the acquisition of mountain lion habitat be a priority use for the Project's Environmental Mitigation Trust Fund. This mitigation for the loss of mountain lion habitat has been added to the Final EIS/EIR.

Flat-Tailed Horned Lizard. Some commenters suggested that flat-tailed horned lizards may be present along the rail line. Flat-tailed horned lizards occupy windblown sand habitat, which does not occur in the rail line right of way. Also, this species was not observed during field surveys. Additionally, BLM biologists provided in a letter dated January 23, 1996 the opinion that the species does not occur in the Project area.

Fringe-Toed Lizard. Commenters suggested that fringe-toed lizards might exist in the Project area. Although the fringe-toed lizard occupies habitat in the region of the Project, its habitat requirements are very specific to sand dunes areas with regular recruitment of windblown sand. These habitat requirements are satisfied in a very limited area in the Coachella Valley and do not occur in the vicinity of the Project. No impacts to the fringe-toed lizard would reasonably be expected from the Project.

Long-Eared Owl. Commenters suggested that the long-eared owl might be present in the Project area. Appropriate nesting habitat for long-eared owls is not present within the proposed landfill site; marginal foraging habitat may be present near the access roads and in washes and near Lake Tamarisk, and in similar settings along the rail line. Thus, the species is considered absent from the sight and has a low likelihood of occurrence near access roads and the rail line. No impacts to the long-eared owl would reasonably be expected from the Project.

Burrowing Owl. Commenters suggested that the burrowing owl might be present in the Project area. Section 3.7 of the Draft EIS/EIR indicates that there is a moderate chance of western burrowing owl occurring in the Project area; however, neither owls, nor signs of owl-occupied burrows were identified during detailed desert tortoise surveys (conducted for the previous EIS/EIR and this document) that focused on burrows. No direct evidence of this species was observed. No impacts to the burrowing owl would reasonably be expected from the Project.

Eagle Mountain Scrub Jay. Commenters have suggested that Eagle Mountain scrub jays could be affected by the Project and that any scrub jay identified in the vicinity of the Project should be considered an Eagle Mountain scrub jay. Page 3.7-25 of the Draft EIS/EIR states that the Eagle Mountain scrub jay is endemic to pinyon-juniper habitat and scrub oak habitat above approximately 1,200 m elevation (approximately 3,600 feet). The Project includes elevations from approximately 700 to 2,550 feet and does not include habitats in which this species occurs (see Section 3.7.2). In addition to lack of suitable habitat in proximity to the Project site, measures to control access by ravens and other scavengers to potential sources of

food, and raven monitoring and control programs (detailed in Section 4.7) are considered sufficient to reduce to less than significant potential impacts to other wildlife populations from increased raven populations.

7.2.6.4 Biodiversity and Ecosystem Function

Several commenters expressed concern about the potential impacts to biodiversity and the ecosystem and the way in which these terms were defined for use in the EIS/EIR. The Draft EIS/EIR (Sections 3.7 and 4.7) defines biodiversity in accordance with the Council on Environmental Quality's (CEQ) guidelines for considering impacts to biodiversity in NEPA documents. As stated in the Draft EIS/EIR, Section 3.7.4, "biodiversity is the concept that all components of ecological systems, both living and nonliving, are interconnected in a hierarchical continuum, and that changes in the diversity at any level can have effects at other levels." Throughout the preparation of the EIS/EIR, resource agencies were consulted to provide input for and comment on the definitions, approaches, and standards of significance and evaluative criteria used in the EIS/EIR. The CEQ definition of biodiversity and the issue of ecosystem function were discussed with resource agencies, including the NPS, Biological Resources Division of the USGS, CDFG, and USFWS in July 1995.

The Draft EIS/EIR presents a summary of the primary threats to biodiversity identified by the CEQ guidelines and the specific Project-related regional threats to biodiversity. The CEQ guidelines identify physical alteration of ecosystems, pollution, overharvesting of populations, introduction of exotic species, and disruption of natural processes as possible factors in impacting biodiversity. In the region of the proposed Project, specific existing threats to biodiversity are related to: (1) the effects of the growing human population in Southern California, including regional air quality degradation resulting from pollutants generated in and transported from the Los Angeles Basin; (2) growth of desert cities and towns that could contribute to air pollution, habitat fragmentation, and the spread of exotic species; and (3) increased cover by exotic species that could provide a fuel source for fires. Evidence of ongoing changes in the function of the desert ecosystem in the region of the proposed Project is indicated by declines in populations and sustainability of a number of plant and animal species that are desert adapted. These species are discussed in Sections 3.7.1.1 and 3.7.2.1 of the Draft EIS/EIR.

Loss of biodiversity has already occurred throughout the regional and local ecosystem to some degree from a variety of sources. Within the local area of the proposed Project site, historic mining activities directly eliminated approximately 5,500 acres of habitat, changed local surface water drainage patters, and provided increased watering opportunities for local wildlife, changing the function of the area at and immediately surrounding the mine and nearby communities. Activities associated with mine operation introduced exotic plant and animal species to the local ecosystem, and fragmented habitat with roads and development along them and the rail line. The Colorado River Aqueduct east of the proposed Project site also fragmented habitat and disrupted movement patterns for a variety of terrestrial vertebrates and provided an additional water source to some species.

A commenter has stated that ecosystem impacts, such as eutrophication, are defined in the "broad sense, referring to the large-scale addition of nutrients (i.e., landfill trash) to the desert ecosystem" (Appendix 2 of Comment 1) and has requested that the EIS/EIR explain the impact of the proposed Project on the regional ecosystem, including impacts on "subtle and interconnected plants, animals, and processes, most of which presently are unknown." (NPS, *Joshua Tree National Park Issues Identification for the Eagle Mountain Landfill Environmental Impact Statement/Environmental Impact Report, 1995*). *The JTNP Issues Identification* paper also identified possible ecosystem impacts attributable to the Project (i.e., wet dry deposition of nitrate, global warming, and invasion of exotic species) and requested additional studies and experiments to assess ecosystem impacts. Upon review of the requested studies and experiments suggested by the NPS, the lead agencies determined that existing data were available and sufficient for assessing impacts to biodiversity and ecosystem function. The Draft EIS/EIR addresses all these possible impacts associated with the Project, including habitat loss, additional nutrients originating directly or indirectly from landfill material (defined as "eutrophication" by NPS), the introduction of exotic species, nitrate deposition, and global warming.

For example, the Draft EIS/EIR (Section 4.7.4) states that the proposed Project could affect biodiversity "primarily as a result of loss of habitat, habitat fragmentation, and changes in the relationship between species in the form of increases in predator/scavenger populations in response to increased food availability at the landfill site, and from increased roadkills." The EIS/EIR presents a full analysis and discussion of these impacts and appropriate mitigation, where applicable.

Control measures proposed to be implemented are described above in General Response 3, and include continuous covering of waste, limiting the work face to 2 acres or less, litter fencing, litter patrols, and providing additional cover for any area that has not been active for 180 days.

To control conditions at the Townsite that could also lead to an increase in predators, measures identified for predator control will also be employed at the Townsite. These measures will include educating Townsite residents of the factors that increase raven and other predator populations, and restrictions requiring disposal of trash and garbage only in tightly closing trash receptacles. Areas around businesses will be patrolled regularly to collect trash. Feeding domestic animals outside in areas accessible to ravens will be prohibited. Buildings and other structures that could provide nest sites for ravens will be monitored regularly. Other restrictions on Townsite activities are described in Section 4.7 of the Draft EIS/EIR.

The mitigation measures proposed for the Project address potential impacts to a broad range of plants and animals that occur in the Project area. Mitigation measures have been identified, in consultation with the appropriate regulatory agencies, for potential impacts to all special status species, and will be implemented as a condition of Project approval. At the request of the CDFG and other resource agencies, additional mitigation measures will be implemented for species that have no protected status and/or are not anticipated to experience significant impacts. For example, the California Barrel Cactus is not a protected species, but

is considered an important food and water source for Nelson's Bighorn Sheep, especially in time of drought. Mitigation for this species includes transplanting and monitoring to ensure the success of transplanting. Similarly, mitigation measures will be implemented for the Common chuckwalla, which has no formal protected status. These will include surveying and removing individual animals from Project areas. The aggregate of the mitigation measures proposed for protected and other species will help assure that the biodiversity of the Eagle Mountain Project area is protected and maintained. The availability of the Environmental Mitigation Fund as a tool to acquire and protect prime habitats in the Southeastern California desert will further contribute to the protection of biodiversity and ecosystem function.

Environmental Mitigation Trust

A number of commenters requested additional detail about how the Draft Environmental Mitigation Trust (Appendix U of the Final EIS/EIR) would function and how it would contribute to the mitigation of Project impacts. The overall goals and functions of the Environmental Mitigation Trust, as currently proposed, are described on pages 4.7-14 of the Draft EIS/EIR. The Draft Trust includes elements of the negotiated Agreement with Kaiser/MRC and NPS and discussions with CDFG. Specifically, the Draft Trust specifies that 72 percent of the fees would be used to acquire lands that provide high-quality habitat for special-status species in the region. In addition, 18 percent of the funds would be used for long-term monitoring, research, and mitigation. The remaining 10 percent of the funds would be used to acquire private parcels in JTNP and for long-term research and mitigation associated with potential Project impacts to JTNP. Lands to be acquired would be identified by an advisory committee appointed by the Trustees of the Trust (the County of Riverside Board of Supervisors).

The Draft Trust agreement specifies that the nine members of the advisory committee shall all be residents of Riverside County and comprise two members of the Board of Supervisors of the County of Riverside; two citizens appointed by the Board of Supervisors, one of whom must be a Native American; two citizens nominated by the Coachella Valley Mountains Conservancy; one citizen nominated by The Nature Conservancy; and one citizen nominated by The Desert Protective Council. Because land acquisition expenditures would be recommended by this advisory committee, specific acquisition locations cannot be identified at this time. The Draft Trust Agreement, however, specifies that lands acquisition expenditures would be restricted to or for the benefit of lands within 15 areas in desert environments of Southern California identified in the Trust Agreement (with provisions for expenditures in other project areas if acquisitions in the 15 identified areas have been reasonably met and with the consent of 4 of the 5 trustees). The 15 areas listed as priority areas for acquisition were identified in a January 1994 California Endangered Species Act Memorandum of Understanding between MRC and the CDFG.

7.2.7 General Response 7

Several commenters questioned the Draft EIS/EIR's conclusions about air quality impacts. The following sections address specific topics of concern related to air quality.

7.2.7.1 Emissions Estimates

Commenters questioned the accuracy of the assumptions and techniques used to develop estimates of emissions associated with the proposed Project. These estimates were based on widely accepted emission estimating techniques and U.S. Environmental Protection Agency (EPA)-, South Coast Air Quality Management District (SCAQMD)-, and NPS-approved models. Conservative assumptions were employed throughout the analyses to ensure that emissions would be overstated rather than understated.

Gas generation rates are based on site-specific factors, which take into account the fact that the waste is projected to have a low moisture content due to very low annual precipitation (fewer than 4 inches per year) and aggressive recycling efforts (i.e., AB 939), which will remove much of the high moisture materials such as greenwaste prior to disposal. Higher gas generation estimates based on the EPA's default values and/or analyses of landfills in other parts of the country reflect much higher annual precipitation levels and different waste stream characteristics and are not applicable to conditions at the proposed Project site.

Estimates of emissions from the flares are based upon the level of control required by SCAQMD's Rule 1150.1 and best available control technology (BACT) guidelines, as well as add-on controls such as oxidation catalysts and urea injection.

Significant emissions of toxic air contaminants are not expected based upon experience at landfills in the South Coast Air Basin (SCAB) and throughout California. Although trace levels of toxic air contaminants are present in landfill gas, the high destruction efficiency required of landfill gas flares by the SCAQMD will destroy at least 98 percent of the toxics. A screening-level risk assessment of flare emissions, using computer models approved by EPA and the SCAQMD, shows risks well below the commonly recognized risk threshold of 10 in 1,000,000 for projects with air pollution controls.

Construction and operation of the proposed Project will produce dust and PM_{10} emissions. The Draft EIS/EIR estimated these emissions based on the projected levels of activity at the site (i.e., the number of vehicles in use, hours of operation per day per vehicle, and road and/or surface conditions where such vehicles will operate). The EPA has developed a variety of emission factors to estimate emissions based upon the type and level of activity predicted. These EPA factors were used in estimating the emissions from the proposed Project. With regard to the effectiveness of the proposed mitigation measures, the Draft EIS/EIR used levels of control demonstrated in studies of dust control/suppression efforts that most closely mirror proposed site operations (e.g., dust control efforts at mining operations). The independent studies that were used (some of which were conducted by the U.S. Bureau of Mines and the EPA) provide a reasonable basis for estimating the effectiveness of dust mitigation measures for specific dust-producing activities. Estimates of

the effectiveness of dust control measures in the SCAQMD CEQA Handbook are based upon a composite of many different types of projects and operations and are not as accurate as studies based on site-specific operations.

7.2.7.2 Significance of Impacts

Commenters questioned the significance of air quality impacts. There are many potential measures of significance found in air pollution statutes and regulations that could be used in assessing the impacts of a project. The SCAQMD CEQA Handbook, for example, considers a project's impacts significant if emissions are in excess of thresholds based on the federal definition of a major source. Emissions for the proposed Project are in excess of those levels. However, the SCAQMD significance levels do not address all air quality impacts and some commenters may feel different significance levels may be more appropriate. Rather than selecting a single measure of significance, the Draft EIS/EIR compares various project impacts to a number of measures, some of which are lower than the levels of significance in the CEQA Handbook, and concluded that the proposed Project impacts to air quality are significant and cannot be mitigated to a level of insignificance.

7.2.7.3 Visibility Impacts at Joshua Tree National Park

Commenters questioned the impacts of Project air emissions on visibility at JTNP. Based on input from the NPS and BLM, an analysis was conducted on the effect of emissions from the proposed Project on visibility at JTNP at selected viewing locations. The NPS selected the viewing locations and provided input on the data and assumptions used in the analysis. A complete analysis was conducted in the Draft EIS/EIR for a variety of viewing conditions. The results of this analysis show that the proposed Project would not create a noticeable change in or impact visibility or haze to the casual observer at locations of maximum impact along the JTNP boundary near the Project site. The visibility analysis takes into account viewer locations, duration of view, and the existing background visual range. Although the NPS disagreed during preparation of the Draft EIS/EIR as to the level of significance, NPS and Kaiser/MRC have reached agreement on long-term air and visibility impact monitoring as detailed in the NPS Agreement (Appendix T).

7.2.7.4 Dust Control

Commenters stated that dust mitigation measures are too vague because they do not specify how frequently water and/or dust suppressants will be applied or what type of dust suppressants will be used. While installing air pollution controls on a piece of equipment, where specific operating conditions and parameters can be mandated to achieve a desired emission reduction, dust control measures, including the amount of water and/or chemical dust suppressants and the frequency of application, are highly dependent on conditions at a site and can vary depending upon weather conditions. The proposed Project has specified detailed dust mitigation measures to reduce emissions and impacts on surrounding areas. During initial site development and operation, it will be necessary to conduct trials to compare the effectiveness of various measures under actual operating conditions and to determine how frequently dust mitigation measures must be employed. Accordingly,

specifying the frequency of watering and application of chemical dust suppressants is not appropriate at this time. These dust emissions will be subject to SCAQMD Rule 403 performance requirements and will be monitored by visibility monitoring as agreed upon between NPS and Kaiser/MRC (see Appendix T).

7.2.7.5 Emissions Offsets

Commenters stated that emissions from the proposed Project should be fully offset to meet the requirements of the SCAQMD and CEQA. Regulation XIII of the SCAQMD requires emission offsets only for emissions from equipment required to obtain a written permit. For sources such as landfills, which provide an essential public service, the SCAQMD provides emission offsets from its Priority Reserve. The Priority Reserve is funded by reductions in emissions made at sources throughout the SCAB. Because the emissions from the landfill gas flares for the proposed Project will be offset by the Priority Reserve, they will, therefore, be fully offset. With regard to the emissions from equipment that does not require a written permit (e.g., motor vehicle emissions not associated with permitted equipment), nothing in Regulation XIII requires that such emissions be offset. Emissions from mobile equipment are regulated by the California Air Resources Board and EPA, through the adoption of standards limiting exhaust emissions and regulations that govern fuel content. The proposed Project has mitigated emissions from mobile sources by agreeing to purchase low emission diesel engines and to use clean-burning diesel fuel. CEQA requires that emissions be mitigated but does not require that emissions be fully offset.

8.0 Responses to Comments

Volume II of the Final EIS/EIR includes copies of all comments (both oral comments made at the public hearings and written comments) received on the Draft EIS/EIR, and responses to each comment.

9.0 References

9.0 References

Anderson, Orlo; MRC. Personal Communication with James Irish, CH2M HILL. 1995.

Earth Systems Consultants Southern California. Results of Phase 1 Environmental Site Assessment, Eagle Mountain Project, Desert Area of Riverside County, California. May, 1996.

Illuminating Engineering Society of North America, IES Lighting Handbook, Reference Volume, 1984.

Curtis, John; City of Coachella Public Works Director. Personal Communication with Andy Linehan/CH2M HILL. December 16, 1996

Appendix

Appendix M
Mitigation Monitoring and Reporting Program

Appendix M
Mitigation Monitoring and Reporting Program

1. Introduction

Under both federal and state environmental law, a mitigation monitoring and reporting program (MMRP) would be required for the Project. The lead agencies for preparation of the environmental document are responsible for developing and implementing the MMRP. For this project, the lead agency under NEPA is the federal Bureau of Land Management, and the lead agency under CEQA is the County of Riverside. For both federal and state projects, the MMRP requires a procedure or mechanism for assuring that all mitigation specified in the environmental document and required by the terms of project approval is accomplished as specified, and that the lead agency is informed of its accomplishment. For BLM, the requirement is discussed in Chapter VI of the National Environmental Policy Handbook (BLM Handbook H-1790-1); for the County of Riverside, the statutory requirement is Section 21081.6 of the California Public Resources Code (CEQA).

From a regulatory perspective, the Eagle Mountain Landfill Project is complex, with a number of agencies, each having jurisdiction over certain kinds of resources, involved in the approval and permitting process. These agencies often have regulatory oversight, enforcement, and reporting requirements that correspond closely to the monitoring and reporting of mitigation in this MMRP.

2. How to Use the MMRP

The MMRP has been designed to include all mitigation recommended in the Final EIS/EIR, arranged by the issues as they are discussed in the document. Codes, abbreviation, and acronyms used in the program are identified at the end of this discussion. The first column lists each potentially significant environmental effect identified in the EIS/EIR, and for each effect, the second column lists corresponding mitigation measures. If adopted by the lead agencies in approving the project, these measures will become legal requirements for inclusion in the project. In most cases, they would be stated as conditions or obligations of the applicant in some project-specific document or permit, or would be required by some more generally applied regulation. The third column identifies the applicable document, permit, or regulation.

The heading "Checkpoint" is intended to identify the place in the activity under consideration where the monitoring or reporting of mitigation will occur, and by a coded entry, the action (such as a field check or report) of the mitigation and reporting program that would occur at that point. "Monitor Period" indicates the phase or stage of the project in which monitoring will occur. The overall project includes operation of the landfill itself and a number of related and off-site activities. The code entry in the Monitor Period column indicates whether the entry applies to the landfill itself, or the particular other activity indicated in the

statements of effect and mitigation. "Report Frequency" lists whether reporting is intended to be done once, at regular periods, or when triggered by an event.

As already noted, one or several agencies responsible for particular resources or services may have an obligation or interest in the accomplishment of mitigation. In some cases, more than one agency may have responsibility for tracking a given measure. These agencies are entered in the next-to-the-last column, and are the ones with particular interest in the accomplishment of the measure, either through the agency's special responsibility, or because the document bearing the condition is that agency's responsibility, or both. The column contains acronyms that are usually readily identifiable but are included in the code list at the beginning of the program. One acronym may need additional explanation: the Local Enforcement Agency is established by the California Code of Regulations specifically as a local agency with responsibility for tracking and enforcing the regulation of solid waste disposal. For the Eagle Mountain landfill project, the LEA is the Riverside County Department of Environmental Health. The last column in the program contains a code entry for the sanctions to be applied in the case of noncompliance with the state mitigation measure.

The U.S. fish and Wildlife Service and the California Department of Fish and Game are named for most biological mitigation, with USFWS also responsible for conditions of the U.S. Endangered Species Act Section 7 permit. Since the Eagle Mountain Landfill Specific Plan No. 252 is a Riverside County planning document, the Riverside County Planning Department is named as the monitoring and reporting agency for a number of measures required in the Specific Plan. Regardless of the particular agency named in the program, however, BLM and Riverside County have overall responsibility for enforcing all mitigation measures, including the power to seek whatever legal remedies may be necessary for noncompliance.

The MMRP also contains additional obligations of the project proponents resulting from contractual agreements with Metropolitan Water District of Southern California (MWD) and the National Park Service (NPS).

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist Codes

Conditional Authority		**Monitor/Report Agency**	
AC/PO	Authority to Construct/Permit to Operate	APCD	Air Pollution Control District
AER	Air Emissions Regulations	ARB	Air Resources Board
BP	Building Permit	CDFG	California Department of Fish and Game
BSMOU	Bighorn Sheep Memorandum of Understanding	CHP	California Highway Patrol
CIWMB	California Integrated Waste Management Board	DMV	California Department of Motor Vehicles
CQA	Construction Quality Assurance Program	LEA	Local Enforcement Agency
EMT	Environmental Mitigation Trust	MWD	Metropolitan Water District of Southern California
EMTSP	Eagle Mountain Townsite Specific Plan	NPS	National Park Service
GP	Grading and Improvement Plans	RCBS	Riverside County Board of Supervisors
HSP	Health & Safety Plan	RCDB&S	Riverside County Department of Building and Safety
MOU-MWD	Memorandum of Understanding - Metropolitan Water District/MRC-Kaiser	RCDEH	Riverside County Department of Environmental Health
MRF	Contract of landfill operator with materials recovery facility/transfer stations	RCFCD	Riverside County Flood Control District
MSWFP	Solid Waste Facilities Permits of material recovery facility/transfer stations	RCFD	Riverside County Fire Department
NA	Not Applicable	RCPD	Riverside County Planning Department
NPDES	National Pollutant Discharge Elimination System Permit	RCTD	Riverside County Transportation Department
NPS Agreement	Agreement—National Park Service/MRC-Kaiser	RWQCB	Regional Water Quality Control Board
NS404	Nationwide Section 404 Permit	SBCM	San Bernardino County Museum
PP	Plot Plan	SCAQMD	South Coast Air Quality Management District
S7	Section 7 Permit (U.S. Endangered Species Act)	USACOE	U.S. Army Corps of Engineers
SOM	Site Operations Manual	USEPA	U.S. Environmental Protection Agency
SP	Specific Plan	USFWS	U.S. Fish and Wildlife Service
SWFP	Solid Waste Facilities Permit		
UPac	Contract of landfill operator with Union Pacific		
WDR	Waste Discharge Requirements		
Checkpoint		**Report Frequency**	
i	Inspection, plan, or field check	a	Once on completion
p	Payment	al	On completion, each event
c	Consultation	b	On violation
r	Report	c	As required, needed, or conditioned
		d	Specified period
		e	At discretion of regulator
Monitoring Period		**Sanctions**	
LA	Preconstruction of landfill	1	Withhold permit, certificate, or authority to proceed
LB	Construction of landfill	2	Stop work order, violation notice, cease and desist order
LC	Operation of landfill	3	Monetary
LD	Closure of landfill		
LE	Postclosure of landfill		
LF	As needed, required, or conditioned		
PA	Preconstruction of particular activity		
PB	Construction of particular activity		
PC	Operation of particular activity		

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist Codes			
Conditional Authority		**Monitor/Report Agency**	
PD	Completion of particular activity		
T	Throughout project		

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist A. Groundwater Quality and Use											
			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
1. Potential for pollution of groundwater due to migration of leachate or landfill gas	a. The acceptance of hazardous waste is prohibited at this landfill. Leachate-causing material, such as free liquid and high-moisture waste, and hazardous waste material will be diverted from the landfill through a waste inspection program, established both at the landfill and at all waste processing facilities sending waste to this landfill, in order to minimize the pollution potential of these materials. All waste loads shall be screened at the respective facilities by trained personnel. Incoming waste will also be periodically checked by specialists with RCDEH. Identified hazardous waste will be collected, temporarily stored onsite in a special containment area provided by the operator for a period not to exceed 90 days, and later transported and disposed in accordance with state and federal regulations. All hazardous materials waste inspection programs shall be approved by the RCDEH and will be subject to periodic inspection to determine compliance. Costs associated with these activities shall be borne by the operator.	SWFP, MRF, PP, SOM, HSP	i			i		LC, PC	e	LEA, RCDEH, RWQCB	2

NOTE: Additional mitigation measures that have been added since publication of the Draft EIS/EIR in July 1996 are highlighted in **<bold>.** Additional contractual obligations per the Agreement between the Project proponents and NPS (included in Appendix T of the Final EIS/EIR and shown here as **bold underlined**) and the Memorandum of Understanding with the Southern California Metropolitan Water District (MWD) (Appendix Y and shown here as ***bold italics***) are incorporated into the Mitigation Monitoring and Reporting Program. The specific implementation mechanisms for these obligations will be determined by MRC/Kaiser and NPS and MWD, respectively.

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist A. Groundwater Quality and Use											
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	b. On the landfill bottom, a composite liner, consisting of an 80-mil HDPE geomembrane and a 2-foot-thick, low-permeability compacted soil layer (hydraulic conductivity of 10^{-7} cm/s or less), which is underlain by another composite liner, will be installed. A side slope liner system consisting of an 80-mil HDPE geomembrane overlying a geosynthetic clay liner material, also will be installed	SWFP, WDR, PP, CQA	i	i	i			LB, PC	c	LEA, RCDEH, RWQCB	1,2
	c. A leachate collection and removal system will be installed above the bottom liner using a blanket drainage system and protected by an additional layer of geotextile fabric and a minimum of 2 feet of compacted soil cover to allow removal of any accumulated leachate from the landfill.	WDR, SWFP, PP, CQA	i	i	i			LB, PB	c	LEA, RCDEH, RWQCB	1,2
	d. A drainage control system will be designed and constructed to divert surface water flow from adjacent areas around the landfill area to prevent run-on to the landfill.	WDR, SWFP, PP, CQA	i	i	i			LA, LB, LC	c	LEA, RCDEH, RWQCB	1, 2

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	e. Final landfill cover shall be constructed in accordance with and exceeding the requirements of EPA, Subtitle D, RCRA regulations. The final cover shall consist of a minimum 18 inches of the lowermost, 2-foot foundation layer composed of low-permeability (hydraulic conductivity $\leq 1 \times 10^{-5}$ cm/s), compacted soil; a 40-mil flexible geomembrane with an equivalent hydraulic conductivity of 10^{-9} cm/s; a UV-stabilized, nonwoven, geotextile cushion layer to protect the geomembrane; a 1-foot-thick erosion protection layer consisting of cobble- and boulder-sized material with an average diameter of approximately 18 inches.	WDR, PP, CQA	i	i	i			LD, LE	al	RWQCB CIWMB	1,2
	f. A minimum 12-inch-thick compacted intermediate soil cover designed to minimize the percolation of rain water into refuse shall be installed over landfill areas expected to remain inactive for more than 6 months after refuse placements.	WDR, PP, CQA		i	i	i		LC	c	RWQCB, CIWMB	2
	g. A landfill gas emissions and migration control system shall be installed to control all gas emissions.	WDR, AC/PO, PP, CQA	i	i	i			LC	c	LEA, RCDEH, SCAQMD	1,2
	h. The foundation and vadose zone monitoring layer shall be placed a minimum of 125 feet above the highest historically known groundwater level.	WDR, SWFP, PP, CQA	i	i				LB	al	RWQCB	1,2

NOTE: Additional mitigation measures that have been added since publication of the Draft EIS/EIR in July 1996 are highlighted in **<bold>.** Additional contractual obligations per the Agreement between the Project proponents and NPS (included in Appendix T of the Final EIS/EIR and shown here as **bold underlined**) and the Memorandum of Understanding with the Southern California Metropolitan Water District (MWD) (Appendix Y and shown here as ***bold italics***) are incorporated into the Mitigation Monitoring and Reporting Program. The specific implementation mechanisms for these obligations will be determined by MRC/Kaiser and NPS and MWD, respectively.

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist
A. Groundwater Quality and Use

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	i. A system of groundwater detection and monitoring wells consisting of at least six downgradient wells and one upgradient well shall be installed prior to initial landfill operations and monitored near the landfill margin and downgradient, in accordance with state and federal regulatory requirements.	WDR, PP, CQA	i	i				LB, LC	d, e	RWQCB	2
	j. A foundation and vadose zone monitoring layer a minimum of 1-foot thick containing a lysimeter monitoring system will be installed to monitor the unsaturated zone beneath the landfill containment system.	WDR, PP, CQA	i	i	i			LB, LC	d, e	RWQCB	2
2. Potential for stormwater to come into contact with refuse and pollute groundwater	a. Stormwater from refuse disposal and handling areas will be collected and sent to onsite detention and evaporation basins or, if stormwater has contacted refuse, it will be treated as leachate.	SWFP, WDR, NPDES, PP, SOM	i	i			i	LA, LB, LC	e	LEA, RCDEH, RWQCB, RCFCD, RCDB&S	2
3. Potential for runoff on completed landfill to permeate landfill mass and produce leachate.	a. A low-permeability final cover, as specified in Mitigation Measure A.1.e., shall be placed on completed side slopes with gradients no steeper than three to one and on the top of the landfill with gradients no less than 3 percent.	SWFP, WDR, CQA	i	i				LD	a	LEA, RCDEH, RWQCB	2
	b. A system of groundwater extraction and monitoring wells shall be installed, in accordance with Riverside County Ordinance No. 682, and EPA, Subtitle D, RCRA Regulations and/or Article 5, Chapter 15, or the California Water Code.	SWFP, WDR, CQA	i	i			i	T	e	RCDEH, RWQCB	2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist A. Groundwater Quality and Use											
			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
4. Potential for water quality degradation from the landfill after its closure.	a. Groundwater monitoring, and any corrective actions on groundwater contamination, gas collection and control, and maintenance of landscaping and drainage shall be continued for 30 years, or as additionally required by state or federal regulations after final closure, with a certified availability of funds for the above postclosure activities defined prior to initiation of each discrete landfill unit.	SP, SOM	i	i				T	e	RCDB&S, RWQCB	1
5. Potential for groundwater overdraft.	a. The applicant shall install low-volume toilets, faucets, and shower heads in all future buildings, and retrofit all existing toilets, faucets, and shower heads in all buildings within the project boundary.	SP	i	i				T	e	RCDB&S	1
	b. The applicant shall prepare a groundwater overdraft status report on the Chuckwalla Basin every 5 years and submit the report to the County Board of Supervisors, summarizing groundwater trends and revealing new and ongoing measures to minimize the impact.	SP	i			r		T	d	RCBS	2
	c. Truck and container wash water will be treated to remove pollutants and the water shall be recycled (see A.2.h).	SWFP, WDR, NPDES, SOM	i	i			i	T	e	LEA, RCDEH, RWQCB	2
	d. Landfill liner construction during evening hours in the summer months shall be encouraged to minimize moisture evaporation within the low-permeability clay-like soil layer.	SWFP, WDR, PP, CQA, SOM	i			i		T	a	LEA, RCDEH, RCPD, RWQCB	2

NOTE: Additional mitigation measures that have been added since publication of the Draft EIS/EIR in July 1996 are highlighted in **<bold>.** Additional contractual obligations per the Agreement between the Project proponents and NPS (included in Appendix T of the Final EIS/EIR and shown here as **bold underlined**) and the Memorandum of Understanding with the Southern California Metropolitan Water District (MWD) (Appendix Y and shown here as ***bold italics***) are incorporated into the Mitigation Monitoring and Reporting Program. The specific implementation mechanisms for these obligations will be determined by MRC/Kaiser and NPS and MWD, respectively.

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist A. Groundwater Quality and Use											
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	e. Prepare a plan for monitoring the effects of groundwater withdrawal in the Chuckwalla Basin associated with the Project on the groundwater resources of the Pinto Basin within the Park and fund the establishment and operation of long-term groundwater monitoring sites. The plan will be subject to joint review and approval by Kaiser/ MRC and NPS prior to implementation. Kaiser/MRC will provide NPS with all monitoring data. If the data demonstrate that significant impacts to NPS water sources in the Pinto Basin are likely to occur due to groundwater withdrawals in the Chuckwalla Basin, Kaiser/MRC and NPS will enter into formal discussions to determine the cause(s) of these potential impacts. If it is determined that these impacts are attributable to the operation of Kaiser/MRC wells, Kaiser/MRC, in cooperation with NPS, will modify its groundwater pumping regime to eliminate these significant impacts. Kaiser/MRC shall not be responsible for any cumulative impacts to NPS water resources in the Pinto Basin attributable to groundwater withdrawals by other water users within the Chuckwalla Valley.	**NPS Agreement**	**I**	**i**	**I**			**T**	**c**	**NPS**	

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	Any modification of the Kaiser/ MRC pumping regime, as required herein, shall be proportionate to the effects of its withdrawals from the Chuckwalla Basin upon NPS water sources within the Pinto Basin when compared to the effects of all withdrawals from the Chuckwalla Basin upon NPS water sources within the Pinto Basin. Kaiser/MRC agrees not to use water from the Pinto Wells for any purpose related to this project										

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist B. Public Health and Safety											
			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
1. Potential impact to workers from exposure to household hazardous materials in the waste stream.	a. Through contracts with the landfill operator, all transfer station and material recovery facility (MRF) operators using the landfill will be required to develop a plan of operations including a waste inspection program that allows for the safe detection and removal of hazardous waste materials.	PP, MRF, MSWFP, SOM	r				i	PA, PC	e	LEA, RCDEH	2
	b. A radioactivity detection device shall be employed at the landfill site to detect the presence of radioactive materials, which will be removed from the waste stream, stored, and transported to a safe disposal site according to applicable regulations.	SWFP, PP, SOM		i		r	i	LC	e	LEA, RCDEH	2
	c. All local waste delivered to the landfill shall be screened for the presence of hazardous materials at an onsite inspection station. Noncomplying waste will be transported to a temporary hazardous waste storage area prior to proper disposal.	SWFP, PP, SOM		i			i	LC	e	LEA, RCDEH	2
	d. All incoming waste shall be subject to regulatory spot checks for hazardous materials. Noncomplying waste will be transported to a temporary hazardous waste storage area prior to proper disposal.	SWFP, PP, SOM		i			i	LC	e	LEA, RCDEH	2
	e. The landfill operator shall develop and implement safety-enhanced operational procedures that allow for the safe handling of hazardous waste by trained personnel.	SWFP, PP, SOM, ASP	r					LC	e	LEA, RCDEH	1,2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist
B. Public Health and Safety

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
2. Potential worker safety and explosion impacts from the migration of landfill gases into work areas and enclosed spaces.	a. Landfill gas collection and removal system will be installed at the landfill, in accordance with plans and specifications approved by the SCAQMD.	SWFP, AC/PO, PP, CQA	i	i			i	LB, LC	e	LEA, RCDEH	2
	b. A composite liner including a high-density polyethylene flexible geomembrane to restrict downward and lateral movement of landfill gases will be installed on the bottom and sides of the landfill.	SWFP, PP, CQA	i	i			i	LB, LC	e	LEA, RCDEH	2
	c. All new enclosed buildings constructed in the specific plan area within 1 mile of the ultimate landfill footprint shall have an impermeable membrane barrier below the foundation slab.	PP, BP, CQA	i	i				PA, PB	al, e	RCPD, RCDB&S	1
	d. All new enclosed buildings constructed in the specific plan area within 1 mile of the ultimate landfill footprint shall have active or passive subfloor ventilation.	PP, BP, CQA	i	i				LC, PA, PB	al, e	RCPD, RCDB&S	1
	e. All new enclosed buildings constructed in the specific plan area within 1 mile of the ultimate landfill footprint shall have special explosion-proof seals for all utility conduits entering from below grade.	PP, BP, CQA	i	i				LC, PA, PB	al, e	RCPD, RCDB&S	1
	f. All new enclosed buildings constructed in the specific plan area within 1 mile of the ultimate landfill footprint shall have monitoring probes in the subfloor environment to verify system effectiveness.	PP, BP, CQA	i	i				LC, PA, PB	al, e	RCPD, RCDB&S	1

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist B. Public Health and Safety											
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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
	g. Permanent subsurface LFG monitoring wells or detectors/alarms shall be placed near any existing and/or new enclosed structures within 1 mile of the ultimate landfill footprint when directed to do so by the RCDEH. The wells will be constructed to allow monitoring to a depth of 20 feet below grade.	SP, PP, SWFP, CQA	i	i				PA, LC, LE	e	RCDB&S, LEA, RCDEH	1, 2
3. Potential impacts from landfill gas migration on structures in the town of Eagle Mountain.	a. Wells to monitor soils to a depth of 20 feet will be placed on about 1,000-foot centers along the northern town perimeter.	SP, SWFP, PP, AC/PO, CQA	i	i				LC, LE, PA, PB	e	LEA, RCDED, RCPD, SCAQMD	1, 2
	b. An onsite emergency response plan will be developed by the landfill operator and submitted to RCPD, LEA, and RCFD. This plan will include adequate staffing and equipment.	SP, SOM, HSP	i	i				LC, LE	e	LEA, RCDEH, RCPD, RCFD	2
4. Potential for right-of-way fires along the railroad.	a. A vegetation/weed abatement program for the Eagle Mountain rail line from Ferrum Junction to the landfill site will be implemented, including regular inspection, selective thinning or removal of vegetation, and use of a ballast regulator instead of a herbicide.	S7, SOM	i			i	i	LC	e	USFWS	2
5. Potential for fires in the refuse load.	a. Incoming refuse will be screened and all burning or smoldering material swill be removed or extinguished.	MRF, MSWFP, SWFP, SOM		i				PC	e	LEA, RCDEH	2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist
B. Public Health and Safety

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
6. Potential for subsurface fires at the landfill due to presence of combustible materials.	a. A landfill gas collection and control system will be installed and operated at the landfill.	SWFP, WDR, AD/PO, PP, SOM	i	i	i			LC	c	LEA, RCDEH, RWQCB, SCAQMD	1, 2
	b. An emergency response plan for the landfill will be developed and implemented.	PP, SWFP, SOM			i			LB	c	RCFD, LEA, RCDEH	1
7. Potential for surface fires at the landfill.	a. An emergency response plan for the landfill will be developed and implemented.	PP, SWFP, SOM	i		i			LB	c	RCFD, LEA, RCDEH	1
	b. The landfill operator will be required to contribute on a fair-share basis to necessary local fire service improvements.	SP	i	p				LB	e	RCFD	1, 2
8. Potential increase in vectors for disease.	a. Waste will be compacted into the working face of the landfill not more than 1 hour after it arrives at the working face.	SWFP, PP, SOM					i	LC	b	LEA, RCDEH	2
	b. A minimum of 6 inches of compacted soil shall be used to cover refuse cells as it is placed and shall completely cover refuse at the end of each working day.	SWFP, PP, SOM					i	LC	b	LEA, RCDEH	2
	c. The raven and other scavenger control program shall be implemented at the landfill, as described in the mitigation measures for biological impacts in this table.	S7, SOM					c, r	T	e	USFWS, CDFG, NPS	2
	d. A bird control program, in addition to the raven control program, to address other nuisance birds (i.e., sea gulls) shall be implemented at the landfill site, in accordance with Title 14.	SWFP, PP, SOM	i				i	T	e	LEA, RCDEH, RCPD	1, 2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist B. Public Health and Safety											
			Checkpoint								
Potential Environmental Effects	**Mitigation Measures and Additional Obligations**	**Conditional Authority**	**Plans**	**Installed**	**Completion**	**Per Event**	**Discretion**	**Monitoring Period**	**Reporting Frequency**	**Monitor/ Report Agency**	**Sanctions for Non-Compliance**
8-A. Potential for blowing litter to impact Colorado River Aqueduct.	**a. Local waste receiving facility in Planning Area 3 will be enclosed.**	**MOU-MWD, SOM**								**RCPD, LEA, MWD**	
9. Potential secondary impacts for waste handling workers to be exposed to small amounts of hazardous wastes at waste transfer stations and materials recovery facilities.	a. Contracts for transfer stations and materials recovery facilities to use the landfill will require inspection and screening of the waste stream, with safe-practice removal, handling, storage, and disposal of any hazardous materials.	MRF, MSWFP, PP, SOM					i	PC	e	LEA, RCDEH	2
10. Potential for exposing landfill workers to accident or harm from heavy equipment operations, noise, odors, and dust.	a. All employees will be trained in a standard set of safe operating procedures and provided a written manual.	SWFP, PP, SOM, HSP					i	PC	e	LEA, RCDEH	2
	b. Onsite inspections will be conducted on a regular basis to ensure safe operating conditions.	SWFP, PP, SOM, HSP					i	PC	e	LEA, RCDEH	2
11. Potential for landfill workers to be exposed to LFG condensate due to accidental spills.	a. Training of workers in standard safety procedures will include the use of protective equipment, detailed job and operating descriptions, identification of safety equipment and procedures, training, and emergency response procedures and provided a written manual.	SWFP, PP, SOM, HSP					i	PC		LEA, RCDEH	2

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
12. Potential for workers to be exposed to landfill gas.	a. A landfill gas collection and removal system will be installed and applicable design features will be employed for landfill buildings as described earlier in this section.	SWFP, PP, CQA	i	i				LC, LD	e	LEA, RCDEH, RWQCB, SCAQMD	2
13. Potential for rail and truck accidents to spill waste.	a. Adequate staff will be maintained onsite to provide cleanup support to Union Pacific workers and local emergency response agencies.	SP, SWFP, SOM	i			i		LC	e	LEA, RCDEH, RCPD	2
	b. Local and state emergency plans will be required by existing statutes to include appropriate responses to accidents involving transported wastes.	existing statutes				i, r		T	c	RCPD, RCFD	2
14. Potential for delays in rail transport system due to catastrophic events or workers strikes.	a. Containers will be designed to be transported by truck as well as rail to allow alternate means of transportation to Eagle Mountain or an alternate landfill site.	SWFP, PP, SOM	i	i				LC	e	LEA, RCDEH	1
15. Potential for public safety.	a. If the transportation of vagrants to the site via rail becomes a problem, the operator shall take steps at appropriate rail terminals to prevent vagrants from boarding the train and unloading at the site. An annual report shall be provided to the Citizen Oversight Committee together with the actions taken for a period of 5 years, and as often thereafter as requested by the Committee.	SP, SOM				r		T	d	RCPD	2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist D. Air Quality											
			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
1. Supervision of air quality monitoring and reporting program.	a. A qualified consulting air quality specialist approved by the County will be retained by the landfill operator to supervise all aspects of the air quality mitigation monitoring and reporting program	SP	i			r, c	r, c	T	c	RCPD, BLM, NPS	1, 2
	b. The qualified air quality specialist will periodically file a report on the status of all air quality mitigation activity with the County of Riverside and the SCAQMD.	SP	i			r		T	d	RCPD, SCAQMD, NPS	1, 2
	c. Purchase, install, maintain, and replace, as necessary, in a manner mutually acceptable to Kaiser/MRC and NPS, a visibility monitoring station within the Park to assess the impacts of the Project on visibility at the Park using an 'IMPROVE' visibility monitoring station or other instruments mutually acceptable to the Parties. NPS is responsible for the station's operation and data collection. The station shall be installed 6 months prior to commence-ment of operation of the Project.	**NPS Agreement**	**i**	**i**				**T**	**c**	**NPS**	
	d. Purchase, install, maintain, and replace, as necessary, in a manner mutually acceptable to Kaiser/MRC, NPS, and SCAQMD, two air pollutant monitoring stations, equivalent to the station in the Park at the Black Rock Canyon Campground, for ozone, NO_2, and PM-10. NPS is responsible for operation and data	**NPS Agreement**	**i**	**i**				**T**	**c**	**NPS, SCAQMD**	

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist D. Air Quality											
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	collection, if the stations are within the Park. The stations shall be installed 6 months prior to commencement of operation of the Project. Kaiser/MRC is responsible for operation and data collection if the stations are outside the Park.										
	e. Purchase, install, maintain, and replace, as necessary, in a manner mutually acceptable to Kaiser/MRC and NPS, a Project site weather station similar to the NPS station located in Pinto Basin to collect wind sped, direction, temperature, and relative humidity, with the addition of Delta T stability measurements, in a 10-meter tower. The station shall be installed six months prior to commencement of operation of the Project. Kaiser/MRC is responsible for the operation and data collection.	NPS Agreement	i	i				T	c	NPS	
	f. Kaiser/MRC and NPS shall jointly develop a protocol for determining the baseline visibility levels at that monitoring station location prior to the commencement of activities at the Project, and for determining whether the Project is resulting in a significant visibility impact. If, based on this protocol and data monitored at this site during operations, it is determined that the Project is causing a significant visibility impact, Kaiser/MRC shall implement	NPS Agreement	i	i				T	c	NPS	

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist
C. Traffic and Transportation

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Potential conflict between proposed and ongoing railroad operations.	a. Refuse trains will be scheduled with Union Pacific on a contractual basis to prevent any conflict with ongoing rail operations.	UPac, SP, SOM	i				i	LC	a	RCPD	2
	b. Train operations will be scheduled during evening, nighttime, and early morning hours to avoid peak-hour vehicle traffic.	UPac, SP, SOM	i				i	LC	a	RCPD	2
2. Potential safety hazard at the proposed railroad crossing of Kaiser Road.	a. Flashing lights will be installed at the railroad crossing of Kaiser Road and EM Road.	SP, MOU-MWD	i	i				LB	e	RCPD, RCDB&S, RCTD, MWD	1, 2
	b. Train operations will be scheduled during evening, nighttime, and early morning hours to avoid peak-hour vehicle traffic.	UPac, SP, SOM	i				i	LC	a	RCPD	2
3. Degradation of street surfaces could occur due to the weight of the refuse laden trucks.	a. Maintenance of Eagle Mountain Road will be by the responsibility of the landfill operator.	SP, SOM	i			p		T	e	RCTD	1, 2
4. Potential conflict of traffic at Eagle Mountain Road Extension/Kaiser Road intersection.	a. Controlled crossings will be installed at the new Eagle Mountain Road extension/Kaiser Road intersection.	SP, CQA	i	i				T	a	RCPD, RCDB&S	1, 2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist C. Traffic and Transportation											
			Checkpoint								
Potential Environmental Effects	**Mitigation Measures and Additional Obligations**	**Conditional Authority**	**Plans**	**Installed**	**Completion**	**Per Event**	**Discretion**	**Monitoring Period**	**Reporting Frequency**	**Monitor/ Report Agency**	**Sanctions for Non-Compliance**
5. Concerns of Coachella Valley residents over increased traffic due to trucks hauling waste to the landfill.	a. The limit on trucks hauling waste from all sources to the landfill will be 100 roundtrips per day.	SP	i				r	LC	e, c	RCPD	1, 2
	b. Three years after start-up of the landfill, there will be no truck-hauling of waste from outside the desert communities.	SP	i				r	LC	e, c	RCPD	1, 2
	c. The limit on trucks hauling waste from the desert communities to the landfill will be 100 per day throughout the life of the project.	SP	i				r	LC	e, c	RCPD	1, 2
	d. There will be no limit on the number of trucks employed during emergency conditions which interrupt railroad operations.	SP	i				r	LC	e, c	RCPD	1, 2
6. Additional measures pursuant to MOU with MWD.	***a. Kaiser/MRC will reconstruct, repair, and maintain Eagle Mountain Road to County current standards.***	***MOU-MWD***				***c***		***LB***	***c***	***MWD***	***1,2***
	b. Kaiser/MRC will construct/ reconstruct MWD MOU-MWD access roads at three locations along Eagle Mountain Road currently used by MWD.	***MOU-MWD***	***i***	***i***				***LB***	***c***	***MWD***	
	c. Kaiser/MRC will take reasonable and appropriate measures to enforce the speed limit on Eagle Mountain Road.	***MOU-MWD***			***c***			***LC***	***c***	***MWD***	

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	d. Kaiser/MRC will construct a drainage system adequate to convey and contain the overflow from the MWD Eagle Mountain Pumping Plant Reservoir at one of the easement crossings of Eagle Mountain Road Extension, after submitting plans to MWD for review and approval.	*MOU-MWD*	*c*	*c*				*LB*	*c*	*MWD*	
	e. The plans for the Eagle Mountain Road Extension crossings of MWD property will be submitted to MWD for review and approval.	*MOU-MWD*	*c*	*c*			*c*	*LC*	*c*	*MWD*	
	f. All railroad and train operations in close proximity to the MWD air strip shall be conducted in a manner so as not to adversely affect operation, accessibility, and regulation of the landing strip. The landfill operator will notify MWD of trains passing within one hour before any train passes the landing strip.	*MOU-MWD*					*c*	*LC*	*c*	*MWD*	
	g. At all Eagle Mountain Road and Extension crossings of the railroad, Kaiser/MRC shall construct, operate, and maintain standard PUC No. 9 crossing signals with guard arms and lights.	*MOU-MWD*	*c*	*c*				*LB*	*c*	*MWD*	
	h. The distance between the rail crossing and road crossing to the MWD access road shall be at least 95 feet.	*MOU-MWD*	*c*	*c*				*LB*	*c*	*MWD*	

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	i. The grade of the MWD access road shall be raised in vicinity of the railroad crossings at Kaiser/ MRC's expense.	*MOU-MWD*	*c*	*c*				*LB*	*c*	*MWD*	

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist D. Air Quality											
			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
1. Supervision of air quality monitoring and reporting program.	a. A qualified consulting air quality specialist approved by the County will be retained by the landfill operator to supervise all aspects of the air quality mitigation monitoring and reporting program	SP	i			r, c	r, c	T	c	RCPD, BLM, NPS	1, 2
	b. The qualified air quality specialist will periodically file a report on the status of all air quality mitigation activity with the County of Riverside and the SCAQMD.	SP	i			r		T	d	RCPD, SCAQMD, NPS	1, 2
	c. Purchase, install, maintain, and replace, as necessary, in a manner mutually acceptable to Kaiser/MRC and NPS, a visibility monitoring station within the Park to assess the impacts of the Project on visibility at the Park using an 'IMPROVE' visibility monitoring station or other instruments mutually acceptable to the Parties. NPS is responsible for the station's operation and data collection. The station shall be installed 6 months prior to commence-ment of operation of the Project.	**NPS Agreement**	**i**	**i**				**T**	**c**	**NPS**	
	d. Purchase, install, maintain, and replace, as necessary, in a manner mutually acceptable to Kaiser/MRC, NPS, and SCAQMD, two air pollutant monitoring stations, equivalent to the station in the Park at the Black Rock Canyon Campground, for ozone, NO_2, and PM-10. NPS is responsible for operation and data	**NPS Agreement**	**i**	**i**				**T**	**c**	**NPS, SCAQMD**	

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist D. Air Quality											
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	collection, if the stations are within the Park. The stations shall be installed 6 months prior to commencement of operation of the Project. Kaiser/MRC is responsible for operation and data collection if the stations are outside the Park.										
	e. Purchase, install, maintain, and replace, as necessary, in a manner mutually acceptable to Kaiser/MRC and NPS, a Project site weather station similar to the NPS station located in Pinto Basin to collect wind sped, direction, temperature, and relative humidity, with the addition of Delta T stability measurements, in a 10-meter tower. The station shall be installed six months prior to commencement of operation of the Project. Kaiser/MRC is responsible for the operation and data collection.	NPS Agreement	i	i				T	c	NPS	
	f. Kaiser/MRC and NPS shall jointly develop a protocol for determining the baseline visibility levels at that monitoring station location prior to the commencement of activities at the Project, and for determining whether the Project is resulting in a significant visibility impact. If, based on this protocol and data monitored at this site during operations, it is determined that the Project is causing a significant visibility impact, Kaiser/MRC shall implement	NPS Agreement	i	i				T	c	NPS	

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	additional mitigation measures, determined necessary by modeling analysis consistent with the U.S. Environmental Protection Agency guidelines sufficient to mitigate the visibility impact.										
2. Emission of pollutants from equipment with internal combustion engines during site preparation and initial construction.	a. Operational measures to control emissions will be implemented, such as limiting idling time for engines and conducting regular preventative maintenance.	SP, SOM		i			r	LB, LC	e	RCPD	2
	b. All diesel engines will use low sulfur and low aromatic fuel meeting California standards for on-highway motor vehicles.	SP, SOM		i		r		LB/LC	e	RCPD	2
	c. The feasibility of using heavy-duty diesel equipment with engines that are certified by the CARB for use in on-highway trucks will be evaluated prior to initial construction, and such equipment will be used, if feasible.	SP, SOM		i			r	LB, LC	e	RCPD	2
	d. Turbocharger and intercooled diesel engines with retarded injection timing will be used when available.	SP, SOM		i			r	LB, LC	e	RCPD	2
	e. An electric version of the temporary asphalt plant will be used.	SP, SOM	i	i				LB, LC	al	RCPD	2
	f. An electric version of the temporary concrete batch plant will be used.	SP, AER, SOM	i	i				LB, LC	al	RCPD	2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist D. Air Quality											
			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
3. Fugitive dust emissions during site preparation and initial construction.	a. Nontoxic chemical dust suppressants and/or water will be applied to all unpaved roads and parking lot surfaces during construction operations.	SP, AER, SOM		i				LB	e	RCPD	2
	b. All trucks using offsite paved haul roads will have covered loads or maintain a 2-foot freeboard height.	SP, SOM		i			i	LB, OC	e	RCPD	2
	c. Soil will be prewatered prior to excavation.	SP, AER, SOM		i			i	LB	e	RCPD	2
	d. Spray nozzles or filters will be used at all open transfer points at the temporary asphalt plant.	AC/PO, SOM	i	i				LB, LC	e	SCAQMD	2
	e. Spray nozzles or filters will be used at all open transfer points at the temporary concrete plant.	AC/PO, SOM	i	i				LB, LC	e	SCAQMD	3
	f. Inactive areas disturbed by construction will be compacted and chemically treated or protected with a fabric cover.	SP, AER, SOM		i	i			LB, LC	e	SCAQMD, RCPD	2
	g. Paved haul roads used during construction will be mechanically swept to remove the buildup of loose material.	SP, AER, SOM				i		LB, LC	e	SCAQMD, RCPD	2
	h. All excavation, grading, and soil removal operations during the construction period will comply with SCAQMD Rule 403.	AER, SOM	i	i				LB	e	RCPD	2
	i. Blowsand areas adjacent to paved haul roads will be chemically stabilized (MC-15).	SP, SOM	i	i				LB	e	RCPD	2

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			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
4. Truck engineers and diesel locomotive exhausts will produce emissions during transport of solid waste to the landfill.	a. Waste haul trucks will comply with all applicable California motor vehicle pollution control regulations.	AER, SOM		i				LC	e	ARB, DMV, CHP	1, 2, 3
	b. Waste haul trucks will use diesel fuel which complies with all applicable California Air Resources Board (CARB) regulations for on-highway diesel motor vehicle fuel.	AER, SOM		i				LC	e	ARB	2, 3
	c. Waste haul trucks will be subject to random checks for excessive smoke.	AER, SOM					i	LC	e	SCAQMD, CHP	2, 3
	d. Waste haul trucks will be subject to periodic checks for excessive smoke and emissions control system tampering.	AER, SOM		i			i	LC	e	ARB, CHP	2, 3
	e. Where haul trucks will be low emission vehicles as defined in the CARB regulations.	AER, SOM			i			LC	e	SCAQMD, ARB, DMV	1, 2, 3
	f. Diesel locomotives on the Eagle Mountain railway will be shut down when the engines are not needed for an hour or more and will receive regular preventative maintenance, in accordance with manufacturers' recommendations.	SP, SOM	i	i				LC	e	RCPD, SCAQMD	2
	g. Diesel locomotive engines on the Eagle Mountain railway shall be fueled with diesel fuel which meets the requirements of CARB for on-highway motor vehicle diesel fuel.	SP, AER, SOM	i	i				LC	e	RCPD, SCAQMD	2

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	h. Diesel locomotive engines purchased for use on the Eagle Mountain railway shall comply with all applicable state and federal emissions control requirements.	AER, SOM		i				LC	al	USEPA, ARB	1, 2
	i. When 3 trains per day are operating, an alternative fuels technical feasibility and cost-effectiveness study shall be undertaken, as a mean of reducing locomotive emissions.	SP, SOM	i, r	i				LC	al	RCPD, SCAQMD	2
	j. A cost-effectiveness study of electrifying the Eagle Mountain railway will be conducted when landfill gas generation is sufficient to warrant the construction of an energy recovery facility at the landfill.	SP	i, r	i				LC	al	RCPD	2
	k. If, upon completion of the initial cost-effectiveness study of the electrification of the Eagle Mountain rail line, it is determined such electrification is infeasible, subsequent studies shall be prepared every 10 years thereafter. However, if, upon completion of any of the subsequent studies, it is determined that the electrification of the Eagle Mountain rail line is feasible, the applicant shall electrify said rail line within 5 years after approval of the environmental review for its installation.	SP				i		T	d	RCPD	2

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
5. Air pollutants will be generated by the exhaust of heavy mobile and stationary equipment used in handling solid waste and materials.	a. Engines will be shut down if equipment will be idle for 15 minutes or longer.	SP, SOM	i	i				LC	e	RCPD, LEA, RCDEH	1, 2
	b. Machines and operators will be scheduled to match the anticipated waste volumes, and the number of container haulers will be matched to the container hauling capability.	SP, SOM	i	i				LC	e	RCPD	2
	c. Diesel-fueled heavy mobile and stationary equipment will be maintained in accordance with the engine manufacturer's recommendations.	SP, SOM	i	i				LC	e	RCPD	2
	d. A record will be maintained of all visual instrument checks for excessive smoke, as well as related repairs.	SP, SOM	i	i				LC	e	RCPD	2
	e. All diesel-fueled equipment at the site will use diesel fuel that meets the requirements of the CARB for on-highway motor vehicle diesel fuel.	SP, SOM	i	i				LC	e	RCPD	2
	f. The feasibility of purchasing equipment with engines certified by the CARB for use in on-highway trucks will be evaluated and implemented, if feasible.	SP, SOM	i	i				LC	e	RCPD	2

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	g. If there are no suitable on-highway equivalent engines, turbocharged and intercooled engines for any diesel-fueled landfill equipment will be purchased and maintained with retarded injection timing.	SP	i	i				LC	e	RCPD	2
	h. All landfill equipment will comply with all applicable federal and state emission control standards.	AER, SOM	i	i				LC	e	USEPA, ARB	2
	i. Wherever available, electric versions of landfill equipment, including overhead cranes, crushers, conveyors, and pugmills will be used. Where not available, alternative fuel technology will be used depending on air permitting standards.	SP, AC/PO, SOM	i	i				LC	e	RCPD, SCAQMD	1, 2
	j. A study covering both economic and technical aspects shall be prepared every 10 years for the potential electrification of all types of onsite mobile and stationary equipment. If it is determined that the electrification of any of the equipment is feasible, the applicant shall electrify said equipment within 3 years.	SP				i		T	d	RCPD	2
	k. Kaiser/MRC agrees to reduce the Project's onsite vehicle No_x emissions from the 551 tons per year (TPY) reported in the EIS/ EIR to 226 TPY.	**NPS Agreement**						**LC**	**e**	**NPS**	
6. Potential emissions of air pollutants due to landfill gases.	a. When the flare gas generation rate exceeds 5 million (5,000,000) cubic feet per day (MCFD), an analysis of the technical and economic feasibility of recovering	SP, AC/PO	i	i			i	LC, LE	e	RCPC, SCAQMD, USEPA	1, 2

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
	energy from the flared landfill gas will be conducted.										
	b. If the analysis indicates that energy recovery is feasible, energy recovery facilities shall be installed and operating before the landfill gas generation rate exceeds 10 MCFD.	SP, AC/PO	i	i			i	LC, LE	c	RCPD, SCAQMD, USEPA	1, 2
	c. If the analysis indicates that energy recovery is not feasible and the landfill gas generation rate exceeds 8 MCFD, an oxidation catalyst system will be retrofitted to the flares, which is capable of achieving at least an 80 percent reduction in carbon dioxide emission and a 50 reduction is nonmethane hydrocarbon emissions before the landfill gas generation rate exceeds 10 MCFD.	AC/PO	i	i			i	LC, LE	e	SCAQMD, USEPA	1, 2
	d. If an energy recovery system is not feasible and no oxidation catalyst system is commercially available before the landfill gas generation rate exceeds 10 MCFD, revised applications will be submitted to the air pollution control agencies reflecting the higher carbon monoxide and nonmethane hydrocarbon emission rates from the flares.	AC/PO	i	i			i	LC, LE	e	SCAQMD, USEPA	1
	e. If an energy recovery facility is not constructed and the landfill gas generation rate exceeds 45 MCFD, a urea injection system (or equivalent) capable of achieving at least a 30 percent reduction in oxides of nitrogen emission will be retrofitted before the landfill gas generation rate	AC/PO	i	i			i	LC, LE	e	SCAQMD, USEPA	1, 2

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	50 MCFD .										
	f. Kaiser/MRC will request of SCAQMD that air offset credits be provided from SCAQMD's priority reserve for each gas flare station prior to its construction.	**NPS Agreement**	**i**	**i**				**LB, LC**	**e**	**SCAQMD, NPS**	
7. Excessive fugitive dust from handling and transfer of solid waste and cover material.	a. Water will be applied as a dust suppressant to all unpaved road and staging area surfaces used temporarily (30 days or less) during landfill operations.	AER, SP, SOM	i	i			i	LC	e	RCPD, SCAQMD	2
	b. Chemical dust suppressants will be applied over a base of compacted coarse tailings on all unpaved road surfaces used more than 30 days, but periodically reconstructed or relocated.	AER, SP, SOM	i	i			i	LC	e	RCPD, SCAQMD	2
	c. All permanent onsite roads will be paved and periodically cleaned with mechanical sweepers.	AER, SP, PP, SOM	i	i	i			LC	e	RCPD, SCAQMD	2
	d. Tailing piles will be prewatered prior to excavation.	AER, SP, SOM	i	i			i	LC	e	RCPD, SCAQMD	2
	e. Water will be applied as a dust suppressant prior to clearing material from pit benches, excavating landfill gas collection ditches, reconstructing transitional roads, and any other operations which could result in dust emissions visible from locations outside the project boundary.	AER, SP, SOM	i	i			i	LC	e	RCPD, SCAQMD	2
	f. All haul trucks will pass through onsite wheel-washing stations prior to leaving the landfill.	SP, SOM	i	i			i	LC	e	RCPD, SCAQMD	2

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Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
8. Odor from landfill operations.	**a. Kaiser/MRC will operate the Project in such a manner as to minimize landfill and arriving waste odors to the extent that Park visitors and employees within the Park will not be subjected to noticeable levels.**	**NPS Agreement**					**i**	**LC**	**c**	**NPS**	
	b. Kaiser/MRC will minimize the number of municipal waste containers waiting in staging areas and monitor and control animal access to containers onsite waiting to be placed in the landfill.	**NPS Agreement**					**i**	**LC**	**c**	**NPS**	

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist
E. Land Use

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Landfilling would render existing iron ore reserves unrecoverable.	a. Landfill operations will be phased to assure that the iron ore resources most feasible to mine are impacted last to allow for recovery, if economically justified and environmentally acceptable.	SP, SWFP	i	i				LC	e	RCPD, LEA, RCDEH	1, 2
2. Potential incompatibility with existing residential and correctional uses surrounding the landfill.	a. Landfill truck traffic will be restricted to Eagle Mountain Road and Eagle Mountain Road Extension to Kaiser Road.	SP, SOM	i				i	T	e	RCPD, LEA, RCDEH	2
	b. All landfill structures will be set back a minimum of 25 feet from the landfill boundary.	SP, PP, BP	i	i			i	LA, PA, T, PB	e	RCPD, RCDB&S	1, 2
	c. All landfill structures will be limited to a maximum height of 60 feet.	SP, PP, BP	i	i				LA, PA, T, PB	e	RCPD, RCDB&S	1, 2
	d. The base of the landfill will be at least 1/2 mile away from the nearest residences.	SP, PP	i	i				LA, LC	e	RCPD, LEA, RCDEH	1, 2
	e. The landfill will operate under a requirement to employ the "Best Available Control Technology" to control fugitive dust, including visible dust, under South Coast Air Quality Management District rules.	AC/PO, SOM	i	i			i	LA, LC, LD	e	SCAQMD	1, 2
	f. The appearance of the later phases of the landfill will be designed to blend with nearby areas by revegetation and control of color, tone, and texture of the final color.	SP	i	i				LC, LD, LE	e	RCPD	1, 2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist E. Land Use											
			Checkpoint								
Potential Environmental Effects	**Mitigation Measures and Additional Obligations**	**Conditional Authority**	**Plans**	**Installed**	**Completion**	**Per Event**	**Discretion**	**Monitoring Period**	**Reporting Frequency**	**Monitor/ Report Agency**	**Sanctions for Non-Compliance**
3. Inconsistency of proposed landfill operations with the existing General Plan land use designation and zoning.	a. Approval of a County of Riverside General Plan Amendment and Rezone will be required for project implementation.	Project Approval			i			LA	a	RCPD	1
4. Conflict between proposed use and the current BLM land classification.	a. Approval of land exchange between BLM and the project proponent that would divest the BLM of reversionary interest in the project site will be required for project implementation.	Project Approval			i			LA	a	RCPD	1
5. Impacts on MWD property from Kaiser/ MRC easement.	***a. Kaiser/MRC will submit all plans for roads, railroads, grading, drainage, and facilities that cross or impact MWD property to MWD for review and approval; Kaiser/MRC will reimburse MWD for the costs of such reviews.***	***MOU-MWD***	***i***	***i***				***T***	***c***	***MWD***	
*Local jurisdiction review and approval process.											

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist
F. Surface Water Drainage/Flooding

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Potential for increased leachate and adverse effect on groundwater if stormwater infiltrates the landfill.	a. A temporary drainage ditch will be constructed around the up-slope perimeter of each working area of the landfill to divert stormwater flows around and away from the fill area as filling occurs.	SWFP, WDR, PP, CQA	i	i			i	LC	e	LEA, RCDEH, RWQCB	2
	b. As each area is filled, it shall be capped with a low-permeability soil cap. Capped areas will have side slopes with an average steepness of 3:1 with intervening benches. Bench drains shall be constructed to discharge surface runoff into perimeter drains north and south of the landfill.	SWFP, PP, CQA		i			i	LC	e	LEA, RCDEH	2
	c. All drainage facilities within the waste management unit will be sized to handle runoff from a storm of 100-year frequency and 3-hour duration and a 500-year frequency will be adopted for review of channel freeboard design.	SWFP, NPDES, SP, PP, CQA	i	i			i	LC	e	LEA, RCDEH, RWQCB, RCFCD	2
	d. For Stage 1 perimeter drainage, Eagle Creek will be piped under the haul road south of the landfill, the existing upper detention basin will be opened, and a channel will be constructed along the north side of the haul road to discharge into the west bowl of the East Pit.	SP, PP, NPDES, MOU-MWD, CQA	i	i			i	LB	a	RCPD, RCFCD, RWQCB, MWD	2

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F. Surface Water Drainage/Flooding

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	e. For Stage 2 perimeter drainage, Bald Eagle Creek will be intercepted by constructing a perimeter channel on the north edge of the landfill to discharge into a natural watercourse. On the south, the Eagle Creek drainage will be extended to discharge into the east bowl of the East Pit.	SP, PP, NPDES, MOU-MWD, CQA	i	i			i	PB	a	RCPD, RCFCD, RWQCB, MWD	2
	f. For permanent, completed landfill perimeter drainage on the south, a channel and detention system will be constructed along the southern borders of Planning Area Nos. 4 and 5 and under the railroad in a box culvert to discharge into a natural streamcourse through an energy-dissipating structure designed to avoid erosive velocities at the MWD aqueduct crossing.	SP, PP, NPDES, MOU-MWD, CQA	i	i			i	PB	a	RCPD, RCFCD, RWQCB, MWD	2
	g. For permanent, completed landfill perimeter drainage on the north, runoff from the northern slope of the landfill and Bald Eagle Creek will be collected in a channel and detention system to the east through an energy-dissipating structure.	SP, PP, NPDES, MOU-MWD, CQA	i	i				PB	a	RCPD, RCFCD, RWQCB, MWD	2
	h. Top of the final landfill slope will be a minimum of 3 percent to promote drainage.	SWFP, PP, CQA	i	i				LD	a	LEA, RCDEH	2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist F. Surface Water Drainage/Flooding											
			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
	i. Final landfill cover shall be constructed in accordance with and exceeding the requirements of EPA, Subtitle D, RCRA regulations. The final cover shall consist of a minimum 18 inches of the lowermost, 2-foot foundation layer composed of low-permeability (hydraulic conductivity $\leq 1 \times 10^{-5}$ cm/s), compacted soil; a 40-mil flexible geomembrane with an equivalent hydraulic conductivity of 10^{-9} cm/s; a UV-stabilized, nonwoven, geotextile cushion layer to protect the geomembrane; a 1-foot-thick erosion protection layer consisting of cobble- and boulder-sized material with an average diameter of approximately 18 inches. Also see A.1.e.	SWFP, PP, CQA	i	i				LD	a	LEA, RCDEH, RWQCB	2
2. Potential for contamination of runoff by stormwater contact with refuse in landfill operational areas.	a. Stormwaters that would enter operational areas from offsite will be intercepted and conducted into existing, modified, or constructed drainage systems discharging into natural watercourses offsite.	SWFP, WDR, NPDES, MOU-MWD, CQA	i	i			i	LC	e	LEA, RCDEH, RCFCD, RWQCB, MWD	2
	b. Runoff from landfill operational areas handling refuse will be collected and diverted into a detention facility for testing. Uncontaminated runoff will be routed into the storm channel system. Contaminated runoff will be classified as leachate and processed through an onsite treatment facility.	SWFP, WDR, NPDES, MOU-MWD, CQA	i	i				LC	e	LEA, RCDEH, RCFCD, RWQCB, MWD	2

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3. Flooding, erosion, and effects on biological resources from discharge of stormwaters collected from around the landfill.	a. In all cases, the drainage system will be designed to discharge into natural watercourses through energy-dissipating structures with peak flows reduced below pre-mining conditions.	SP, PP, NPDES, MOU-MWD, CQA	i	i				T	e	RCDB&S, RCFCD, RWQCB, MWD	2
4. Potential for flooding in Eagle Mountain townsite as southerly flow patterns are reestablished because of diversion of stormwaters around the landfill.	a. Collection, diversion, and discharge of stormwaters through the landfill drainage system will eliminate the potential for flooding of the Eagle Mountain townsite due to construction of the landfill.	SP	i	i				T	e	RCFCD, MWD	1
5. Changes in storm water flows toward the Colorado River Aqueduct (CRA).	***Kaiser/MRC will submit plans for MWD review and approval prior to changes in volume, flow rate, or flow direction of any runoff toward the CRA.***	***MOU-MWD***	***i***	***i***				***LC***	***c***	***MWD***	

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G. Biological Resources

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
A. General Protection Measures	a. The measures in CDFG Section 2081 Agreement will be implemented:	SP	i			r, c	r, c	T	c	RCPD, BLM, USFWS, CDFG	1,2
	1) Convey 2,486 acres of high-quality habitat to BLM to consolidate federal ownership of environmentally sensitive lands and promote biodiversity. Kaiser will also convey to BLM **400** acres as direct mitigation for loss of **160** acres of desert tortoise habitat.										
	2) Payment of up to $45,000 to the University of California to construct a pool for an experimental population of pupfish at Deep Canyon Reserve.										
	3) Pay to County of Riverside a mitigation fee of $1.00 per ton of waste disposed of at the landfill for the life of the Project to acquire high-quality habitat and to study and monitor effects of the landfill.										
	b. A qualified consulting biologist will be retained by the landfill operator to supervise all aspects of the biological mitigation monitoring and reporting program in cooperation with the NPS/BLM monitoring team.										
	c. The consulting biologist will file annual reports on the status of all biological mitigation activity and related information for the preceding year with the County of Riverside, the BLM, the CDFG, and the NPS.										

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			Plans	Installed	Completion	Per Event	Discretion				
B. Desert pupfish 1. Impacts to desert pupfish populations during repair and maintenance of the rail line near the Salt Creek tributary.	a. Plans for construction or major maintenance, including trestle maintenance, will be reviewed by a qualified biologist and will include designs and specifications that will avoid impacts to desert pupfish, to the satisfaction of the USFWS and CDFG.	S7, CQA	i			i		PA	al	USFWS, CDFG	2
	b. Storage and staging areas will be placed in locations which will not affect the habitat, and measures to avoid any discharge of pollutants will be incorporated. Refueling equipment will be maintained at Eagle Mountain Railroad and mainline junction.	S7, SOM	i	i		i		PA, PB, PC	al	USFWS, CDFG	2
	c. Construction activities will be prohibited during the fall when pupfish populations are most restricted and vulnerable.	S7, SOM	i	i		i		T	b	USFWS, CDFG	2
	d. A qualified biologist will be retained to monitor any maintenance work conducted on or near pupfish habitat.	S7, SOM				i		T	c	USFWS, CDFG	2
2. Potential impacts to desert pupfish during weed abatement program.	a. All weed/plan removal will be done by hand. No herbicides or other chemicals will be used.	S7, SOM				i		T	b	USFWS, CDFG	2

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			Plans	Installed	Completion	Per Event	Discretion				
3. Possible but unlikely impact on pupfish from train operations.	a. Prior to each passage of a locomotive over Eagle Mountain Railroad, an inspection of the fuel and lubricant holding tanks will occur. All leaks will be fixed prior to passage over Salt Creek. A log of all inspections will be kept and provided to the BLM or the USFWS upon request. A nonporous material or other suitable material or structure capable of containing petroleum products will be incorporated into the Eagle Mountain Railroad at the Salt Creek trestle. The integrity of this material will be inspected on a daily basis.	S7, SOM				i		T	c	USFWS, CDFG	2
	b. Drainage will be established so runoff form the trestle or adjacent Eagle Mountain Railroad does not enter desert pupfish habitat.	S7, SOM	i					LA	a	USFWS, CDFG	2
	c. Measures to restore pupfish habitat in the event of an accident will be incorporated as part of response plan. If an accident causes the loss of the local pupfish population, the habitat will be restocked with pupfish of the same genetic strain.	S7, SOM	i					LA	a	USFWS, CDFG	2
	d. The USFWS will be notified within 3 working days if any pupfish is found dead or injured. Notification shall include date, time, location, cause of death or injury, and any other pertinent information.	S7, SOM				i		T	c	USFWS	2

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			Plans	Installed	Completion	Per Event	Discretion				
	e. If more than one pupfish is taken, BLM shall reinitiate consultation with USFWS immediately. Operations will be stopped in the period between initiation and completion of the new consultation, if it is determined that impact is irreversible and adverse.	S7				i		T	c	USFWS	2
	f. MRC will aid CDFG and University of California to establish an experimental population of pupfish. **CDFG to determine source of individuals collected to establish experimental population.** MRC will, 36 months after startup of operations, pay up to $45,000 to construct a pool for the experimental pupfish population.	EMT	i					LA	a	USFWS, CDFG	2
	g. Data from ongoing CDFG surveys of pupfish in the Salt Creek drainage will be assessed to determine whether railroad operations are affecting pupfish.	S7					c	PA, PC	c	USFWS, CDFG	2
	h. If the assessment of data suggests impacts on pupfish, corrective actions will be developed in consultation with USFWS and CDFG.	S7					c	PC	c	USFWS, CDFG	2
	i. All landfill-associated employees will participate in a desert pupfish education program.	S7					c	T	e	USFWS	2
	j. All requirements in Streambed Alteration Agreement related to desert pupfish will be implemented.	S7	i					LA	a	USFWS, CDFG	2

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4. Potential impacts to desert pupfish in the Salt Creek habitat area from a railroad accident.	a. BLM will ensure that a contingency plan is in place prior to movement of a locomotive on Eagle Mountain Railroad. BLM will be the lead agency to coordinate corrective actions/activities in the event of a derailment. BLM will coordinate identification of responsible parties and roles in the event of a spill or other Project-related activity. The participating parties will be signatory to the contingency plan.	S7, SOM	i					T	a	USFWS, CDFG	2
	b. In the event of an accident near pupfish habitat, a biologist will be included as a response and clean-up team member and USFWS, BLM, and CDFG will be notified immediately. The biologist will monitor cleanup operations.	S7, SOM	i	i				PA	a	USFWS, CDFG	1
	c. Measures to restore the pupfish habitat in Salt Creek and its tributary in the event of an accident shall be incorporated as part of the response.	S7, SOM				i	c	PC	c	USFWS, CDFG	2
	d. If restocking of pupfish is required in the aftermath of an accident, the nearest suitable genetic strain of pupfish will be the source of the transplantation. Potential restocking sources shall be reported to the USFWS at 5-year intervals.	S7		i				PA, PC	c	USFWS, CDFG	2
	e. All emergency procedures will be proposed to and approved by USFWS and CDFG prior to implementation.	S7, SOM, HSP					c, r	T	c	USFWS, CDFG	2

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	f. Reports of all emergency procedure results will be submitted to the USFWS and CDFG upon completion.	S7			r			PD	c	USFWS, CDFG	2
C. Common Chuckwalla 1. Potential impacts to 1,038 acres of habitat.	a. Preconstruction surveys shall be performed by a qualified biologist throughout landfill areas ahead of the expanding footprint. Chuckwallas removed will be marked and placed into adjacent areas outside the impact zone. The designated biologist will maintain records of the translocated chuckwallas. Portions of EMT will be allocated for acquisition of prime chuckwalla habitat.	S7, EMT	i					PA	c	USFWS, CDFG	2
D. Desert tortoise 1. Potential for miscellaneous direct and indirect impacts to tortoise population/ habitat.	a. The landfill operator will designate a field contact representative (FCR) responsible for overseeing compliance and coordination with BLM stipulations. The FCR will have authority to halt all associated activities in violation of the stipulations. The biologist shall provide a full report to the BLM and USFWS of all desert tortoise that are found and moved from harm's way within 30 days to the USFWS following the first desert tortoise activity period that coincides with Eagle Mountain Railroad activity.	S7, SOM	i					T	e	USFWS, CDFG	2
	b. USFWS should be notified within 3 working days of any listed species found dead or injured in or adjacent to the Project area.	S7, SOM				c		T	c	USFWS, CDFG	2

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	c. The landfill working face shall be limited to 2 acres. No areas will be left uncovered for more than 60 minutes. Twelve inches of interim cover shall be placed on areas not active for 180 days and 6 inches of daily cover will be applied.	S7, SOM		i				T	e	USFWS	2
	d. The landfill operator will develop a contingency plan to address the potential for fire along Eagle Mountain access road and the Eagle Mountain Railroad. A list of phone numbers of all local fire departments will be made available to all waste haulers and train operators.	S7, SOM	i					T	c	RCFD	2
	e. Focused tortoise surveys will be conducted to remove tortoises from harm's way prior to any Project-related ground disturbances on the eastern and northeastern parts of Phase 4 and south of the Townsite.	S7, SOM		c				T	c	USFWS, CDFG	2
	f. Landfill operators should be familiar with tortoise occurrence in the area per the requirement for a tortoise education program. Tortoises found by landfill operators or biologists within impact areas on the landfill during focused surveys, will be reported to the landfill's environmental coordinator and USFWS, and transported to the nearest, adjacent area, outside all phased development.	S7, SOM		c				T	c	USFWS, CDFG	2

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	g. Owners of domestic animals or pets within the Townsite will be required to keep their animals within fenced areas or on leashes. A condition will be added to the Development Agreement to require fencing. Domestic livestock will also be prohibited through the Development Agreement.	S7, EMTSP	i					T	c	USFWS	2
2. Possible direct impacts on tortoises during construction, and loss of 150 acres of tortoise habitat, from improvements and widening of Eagle Mountain Road.	a. A preconstruction survey will be conducted by a qualified biologist who will remove all tortoises within the 150-foot construction zone to a safe distance (300 feet) in the immediate vicinity.	S7				i		PA	a	USFWS, CDFG, RCDB&S	1
	b. The landfill operator will convey to BLM **400** acres of desert tortoise habitat in addition to those acres involved in the proposed land exchange. A tortoise-proof fence will be placed on either side of Eagle Mountain Road, resulting in a nonbreachable barrier. Tortoise moving along the barrier will be passively guided to safe passage points under the road. This fencing will be monitored yearly and corrective action taken to maintain the integrity of the barrier.	S7, EMT			c			PD	a	USFWS, CDFG	1

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3. Possible impacts from predation on juvenile tortoises by ravens, coyotes, kit foxes, and other predators attracted to the landfill.	a. A raven **and other predator** monitoring program, including preoperation monitoring, will be developed and enacted in conformance with BLM methodologies. Monitoring of ravens will continue throughout the life of the landfill project or until BLM, USFWS, and CDFG determine it is no longer necessary. **Monitoring of other predators will continue for a minimum of 10 years.**	S7, SOM, **NPS Agreement**					c,r	T	e	USFWS, CDFG, **NPS**	2
	b. The perimeters of all landfill and waste handling areas will be fenced with fencing designed to exclude predators such as coyotes and kit foxes.	S7, PP, SOM, **NPS Agreement**	i	i				T	c	RCDB&S, USFWS, CDFG	1
	c. A minimum 6-inch covering of dirt/tailings will be placed over deposited **and compacted** refuse on a daily basis to minimize attracting ravens to refuse.	SWFP, PP SOM, **NPS Agreement**					i	LC	b	LEA, RCDEH, CIWMB	2
	d. A nonlethal **predator** control program will be conducted, including hazing at the landfill site, **aversive conditioning,** prompt removal of road-killed wildlife along access roads, and the possible use of bird repellent methyl anthranilate.	S7, SOM, **NPS Agreement**					c	LC	b	USFWS, CDFG	2
	e. If necessary, and subject to the approval of BLM, USFWS, **NPS,** and CDFG, a raven control program will be implemented that may include nest destruction, shooting, poisoning, and alteration of landfill operations.	S7, **NPS Agreement**					c	LC	b	USFWS, CDFG	2

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4. Potential loss of desert tortoise during regular maintenance of rail track.	a. A desert tortoise survey will be completed prior to all construction and maintenance activity. All tortoise found within the impact area will be removed. If an existing burrow of the correct dimensions is not available, an artificial burrow will be constructed and the animal released at that site.	S7		i		i		PA	al	USFWS, CDFG	2
	b. An authorized biologist will be present during the clearance survey(s). Authorized person(s) will be approved by USFWS prior to onset of activities that would impact desert tortoise.	S7		i		i		PA	al	USFWS, CDFG	2
	c. Tortoises encountered in the summer will be held until temperatures have dropped to or below 90°F and then released. Desert tortoise found during the winter will be held and isolated from other desert tortoise until spring, at which time they shall be released. With prior approval from USFWS, tortoise removed during winter may be released and not held for the duration of the winter.	S7		i		i		PA	al	USFWS, CDFG	2
	d. Tortoise that are handled will be marked for future identification.	S7		i		i		PA	al	USFWS, CDFG	2

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	e. Operators shall inspect under all vehicles, equipment, and supplies for desert tortoise. All staging areas will be clearly marked. No habitat-damaging activity shall be permitted outside these designated areas. BLM will ensure that a preconstruction survey is conducted within 1 week of commencement of construction and/or maintenance activities. All occupied burrows within 100 feet of the track will be examined and marked by a qualified biologist. These burrows will be inspected on a daily basis during construction and/or maintenance activities.	S7, SOM		i		i		PA	al	USFWS, CDFG	2
	f. Any occupied burrows that collapse during repair and maintenance activities would be excavated immediately and the tortoise translocated to an artificial burrow. Any aboveground tortoise found within harm's way along the corridor during repair procedures shall also be translocated.	S7, SOM		i		i		PA	al	USFWS, CDFG	2

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5. Potential impact to desert tortoise populations due to train kills of tortoises and fragmentation of habitat by reactivation and operation of the Eagle Mountain Railroad.	a. Existing culverts will be provided under the rail line to allow unobstructed use as crossings by tortoises. Tortoise-proof barriers, if needed, will be placed and oriented to guide tortoises to the culverts. New culverts will be placed in areas where current tortoise use of the railroad track berm is concentrated. Design of all barriers and culverts, and their locations, will be approved by USFWS and BLM. Culverts will be monitored regularly and kept clear of obstructions for the life of the Project.	S7, CQA		i		i		LA	a	USFWS, CDFG	2
	b. At an appropriate interval before each train trip on the Eagle Mountain rail lines (Feb-Oct), a qualified biologist will survey and remove tortoises on or adjacent to the railroad right-of-way. Removed tortoises will be placed off the rail line berm.	S7, SOM				i		PA	al	USFWS, CDFG	2
	c. Records will be evaluated within 3 years to assess optimum locations for culverts and barriers, if needed. A barrier/culvert system will be constructed at appropriately identified locations.	S7				c		PC	c	USFWS, CDFG	2
	d. Ballast will be placed between the tracks at 100-foot intervals in tortoise habitat areas to allow tortoises caught between the tracks to escape. Ballast areas will be inspected monthly (Mar-Sept) and repaired immediately.	S7, CQA	i	i				PB	al	USFWS, CDFG	2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist G. Biological Resources											
			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
	e. A long-term tortoise population monitoring program utilizing sampling methods approved by the USFWS and BLM adjacent to the Eagle Mountain Railroad and Eagle Mountain Road rights-of-way will be developed to monitor changes in tortoise population as the project proceeds. This monitoring program will continue for the life of the project and include 2 years of preconstruction monitoring.	S7	c				i	T	e	USFWS, CDFG	2
6. Potential loss of desert tortoises to road traffic.	a. Culverts will be provided at least once every mile along Eagle Mountain Road from the intersection of Interstate 10 and Eagle Mountain Road north for 4.5 miles. A minimum of four crossings will be provided. If desert tortoise are found not to make use of the culverts under Eagle Mountain Road, then other measures will be developed as necessary. If monitoring shows an additional need for culvert crossings, they will be installed within 1 year of that determination.	S7, CQA	i	i				PB	a	USFWS, CDFG, RCDB&S	1, 2
	b. The landfill operator will be responsible for removing road-killed animals from along Eagle Mountain Road to reduce the attraction of ravens and other predators. This activity will occur at least daily.	S7, SOM	i	i				PB	a	USFWS, CDFG, RCTD	1, 2
	c. A qualified biologist will monitor Eagle Mountain Road and Kaiser Road for tortoise activity throughout the life of the project.	S7		i				T	c	USFWS, CDFG	2

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			Plans	Installed	Completion	Per Event	Discretion				
	d. Biologists will survey Eagle Mountain Road on a daily basis and tortoise encountered will be moved 300 feet from the right-of-way, including tortoises reported by truck drivers and local residents.	S7, SOM		i				T	c	USFWS, CDFG	2
	e. A speed limit of 35 miles per hour will be set and enforced along Eagle Mountain Road until barriers are in place.	SP, SOM	i	i				PA, PB	a	RCPD, RCDB&S	1
	f. A mandatory local worker and truck driver education program will be implemented prior to commencement of landfill operations, with voluntary participation by townsite residents.	SP, S7, SOM	i				r	T	c	USFWS, CDFG, RCPD	1, 2
7. Potential cumulative impacts to desert tortoise regional population from habitat fragmentation and raven predation.	a. Measures described above will be implemented to mitigate potential cumulative impacts from habitat fragmentation and raven predation due to this project. Development of a desert tortoise management plan for the Joshua Tree National Park and closure of the Desert Center landfill would also help mitigate cumulative impacts, but these measures cannot be implemented as a condition of this project. All mitigation measures implemented for this project will be altered, if necessary, to conform to the USFWS Desert Tortoise Recovery Plan.	See D.2, D.3, and D.5 above									

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8. Indirect impacts to tortoises associated with an increase in human activity including vandalism, illegal collection, and off-road-vehicle use.	a. All landfill employees will participate in an education program as required by USFWS. Content of the program would be submitted to BLM for review at least 30 days prior to the presentation of the program to employees. A Desert Tortoise Procedure Card will be distributed to all employees.	See D.5.f. above									
E. California leaf-nosed bat 1. Impacts to the California leaf-nosed bat could occur due to loss of roost in the large adit location in an area to be landfilled in approximately 35 years.	a. Spring and winter monitoring surveys of bat activity at the adit will be conducted prior to commencement of landfill operations.	S7		i			r	LA	c	USFWS, CDFG	2
	b. The Black Eagle adit will be immediately opened to create an alternative winter roost site.	S7		i			r	PB, PC	c	USFWS, CDFG	2
	c. The opening of the new adit will be gated with a CDFG-approved bat gate. This mitigation will be monitored by a CDFG-approved biologist.	S7		i		i	r	PC	a	USFWS, CDFG	2
	d. Should monitoring at the two adits indicate that bats are abandoning the Eagle Mountain, but not recolonizing the new adit, a third adit will be constructed at a location to be determined with appropriate agencies.	S7		i		i		PC	a	USFWS, CDFG	2
	e. Bat monitoring will be continued through the life of the landfill operation.	S7	i	i				PA, PB	a	USFWS, CDFG	2

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F. Eagle Mountain scrub jay 1. Potential increase in regional raven population could result in raven predation of scrub jay eggs and young.	a. Raven control measures for impacts to desert tortoise will also mitigate the potential impact on the Eagle Mountain scrub jay.	See C.2.a.-e. above									
G. Alverson's foxtail cactus 1. Impacts to 165 acres of habitat near proposed storage area, 125 acres habitat within Eagle Creek Wash by construction of the landfill, and to approximately 33.3 acres of habitat by the proposed Eagle Mountain Road extension and railroad spur.	a. Individual transplanting will be made within the area with each project phase.	S7, SP, PP	i	i				5 years	a	USFWS, CDFG, RCPD	1
	b. Seeds from transplanted individuals will be collected and stored.	S7, SP, PP	i	i				5 years	a	USFWS, CDFG, RCPD	1
	c. Survival of transplanted individuals will be monitored for 5 years.	S7, SP, PP	i	i				5 years	a	USFWS, CDFG, RCPD	1
	d. A 2-year cactus transplantation test study shall be conducted to determine the viability of relocating cacti:	S7, SP		i				PA	c	USFWS, CDFG, RCPD	2

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			Plans	Installed	Completion	Per Event	Discretion				
	1. Prior to disturbance, the number of plants per acre will be determined; and soils analyses conducted at current potential transplant sites to assess compatibility. 2. Approximately 10 to 15 percent of cacti present will be transplanted. 3. Sites selected for transplant will be planted with individuals salvaged from impacted areas at a density similar to the natural population. 4. Final mitigation areas will be monitored monthly for one growing season to measure survivorship and determine transplant program success. 5. A final report will be prepared for BLM, CDFG, and NPS. 6. During rail maintenance and repair activities, staging/storage areas will be selected based on preconstruction surveys. 7. Transplantation **test study** will begin 1 year prior to impacting the cactus.										
H. California barrel cactus 1. Potential loss of approximately 600 individuals over life of Project.	a. Individual transplantings will be made within the area with each Project phase.	S7, SP, PP	i	i				5 years	c	USFWS, CDFG, RCPD	1
	b. Seeds from individuals to be transplanted will be collected and stored during **reproductive season prior to transplantation**.										

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			Plans	Installed	Completion	Per Event	Discretion				
	c. Survival of transplanted individuals will be monitored for 5 years.							T	C	CDFG	
I. Mountain lion **1. Loss of habitat.**	**a. Priority acquisition of mountain lion habitat under EMT.**	EMT, S7						T			
J. Orocopia sage 1. Potential impacts to Orocopia sage along the Eagle Mountain Railroad right-of-way.	a. Prior to commencement of construction activities, a qualified biologist will meet with the construction supervisor to discuss avoidance and minimization of impacts.	S7, SP	i					PA	c	USFWS, CDFG, RCPD	2
	b. Specific area to be avoided will be delineated before construction by flagging or other means.	S7, SP, SOM		i				PA	c	USFWS, CDFG, RCPD	2
	c. Maintenance and construction staging areas will avoid areas containing Orocopia sage.	S7, SP, SOM	i	i				PA, PB	a	USFWS, CDFG, RCPD	2
	d. Roads adjacent to the rail line will be kept to their current width.	S7, SP	i	i				PA, PB	c	USFWS, CDFG, RCPD	2
	e. Employees will be alerted to avoid off-road travel and other disturbances in areas where sage is present.	See D.5.f. above									
K. Nelson's bighorn sheep 1. Loss of three permanent and one temporary bighorn sheep watering sources.	a. A preconstruction telemetry study will be conducted to identify new locations to place permanent water sources, based on herd movements.	S7				i, r		LA	a	USFWS, CDFG	2
	b. Four new, permanent water sources, will be placed away from the mine site at least 1 year before existing water sources are removed. The sites and designs will be selected and/or approved by BLM, CDFG, UNLV, and JTNP.	S7, **NPS Agreement**		i	i, r			LA, LB	a	USFWS, CDFG, **NPS**	2

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			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
	c. Buzzard Springs will be rehabilitated and cleared of tamarisk.	S7		i	r			LA, LB	a	USFWS, CDFG	2
	d. New and rehabilitated water sources will be maintained through the life of the landfill and replaced if necessary.	S7		i				T	e	USFWS, CDFG	2
	e. Telemetry studies will be continued after operations begin to assess sheep use of new watering sources until USFWS and CDFG are satisfied that sheep water-source use has stabilized.	S7			r		c	LC	a	USFWS, CDFG	2
2. Loss of about 1,038 acres of bighorn sheep habitat due to project implementation.	a. Creation of new water sources and EMT land purchases will allow expansion of sheep ranges into new habitat.	See I.1.a.-f. above									
	b. Approximately 644 acres of bighorn sheep habitat onsite will be preserved in open space as usable habitat and a buffer area between the landfill and relocated sheep population.	S7, SP, PP	i				i	LA	a	USFWS, CDFG, RCPD	1, 2
3. Potential impacts from increased human presence, including landfill operations, residential uses, poaching, pets, and domestic livestock.	a. Information on bighorn sheep will be incorporated in the mandatory local worker and truck driver educational program described above as mitigation for desert tortoise impacts.	See D.5.f. above									
	b. Only authorized individuals will be allowed to possess firearms on the landfill site.	S7, SP	i	i				T	e	USFWS, CDFG, RCPD	1,2,3
	c. Dogs will be prohibited on the landfill site unless they are confined or restrained.	S7, SP, EMTSP	i	i				T	b, e	USFWS, CDFG, RCPD	1,2,3
	d. Domestic livestock will be prohibited in the Townsite.	EMTSP	i	i				T	e	USFWS, CDFG	1,2,3

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	e. To the degree possible, trains will not stop in the pass between the Orocopias and Chocolate Mountains along Eagle Mountain Railroad. If trains must stop in the area due to emergencies, they will not idle, but will be turned off if possible. If possible, maintenance activities on this section of the line will not occur in summer. Trains will proceed through the pass at the slowest possible speed to reduce noise levels and the possibility of collisions with animals. **Trains going to the landfill site will not exceed an average speed of 20 mph and trains leaving the site will not exceed an average speed of 40 mph.**	S7, SOM				c		T	c	USFWS, CDFG	2
	f. If tortoise fences are required along Eagle Mountain Railroad, they will be designed to exclude tortoises but not restrict sheep movement. Prior to fence placement, CDFG will be consulted to discuss fence location and design.	S7	i					LA	c	USFWS, CDFG	2
	g. Trust funds will be used to purchase additional lands for habitat preservation.	EMT, S7	i					T	c	USFWS, CDFG	2
	h. If any sheep are injured or killed by a train, this information will be fully documented, and the CDFG contacted within 1 working day of the accident.	S7, SOM				c		T	c	CDFG	2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist H. Geology and Mineral Resources											
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Potentially expansive soils may occur in the fine tailing storage lagoons and in areas underlain by alluvial material.	a. Soils underlying the landfill footprint will be evaluated by a geotechnical engineer and/or an engineering geologist and areas with expansive soils will be subject to appropriate mitigation before landfilling, such as selective or remedial grading.	WDR, CQA	i	i				LA, LB	a	RWQCB	2
2. Instability of manufactured slopes in bedrock and alluvial areas of the East Pit.	a. As grading for the landfill occurs, a geotechnical engineer and/or engineering geologist will determine safe slope angles and maintain slopes within this range, with flattening of slopes or construction of fill buttresses as needed.	WDR, CQA	i	i				LA, LB	c	RWQCB	2
	b. A geological engineer and/or engineering geologist will assure that the liner is placed against safe slope angles.	WDR, CQA	i	i				LA, LB	c	RWQCB	2
3. Potential for settlement in waste rock dumps northeast of the East it and loose alluvium in the eastern project areas.	a. Unsuitable soils will be excavated and/or recompacted prior to liner construction in areas of potential settlement.	WDR, CQA	i	i				LA, LB	c	RWQCB	2
4. Potential slope failure and dislodgment of loose materials from existing manufactured slopes in the strong seismic event.	a. Loose rock and materials will be progressively scaled from benches above the working face of the landfill.	WDR, CQA	i	i				LA, LB	c	LEA, RWQCB	2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist I. Visual, Recreation, and Wilderness Resources											
			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
1. Potential visual contrast between the landfill and the characteristics of surrounding landscape.	a. Shape and mass of landfill area will blend with nearby forms more than the existing graded areas, and color, tone, and texture of the final cover will be designed to reduce contrast with adjacent undisturbed area.	SP, CQA	i	i				LD	a	RCPD	2
	b. Grading and landfill limits will be clearly staked or fenced, construction access will be controlled, and ancillary activities will be confined to existing disturbed areas wherever possible to minimize additional disturbance of the native landscape.	SP, PP, CQA, SOM	i	i				T	e	RCPD, RCDB&S, LEA, RCDEH	2
2. Potential visual impacts from Desert Center, Lake Tamarisk, Interstate 10, and State Highway 177.	a. Visual contrast between the landfill and surrounding area will be reduced as described for the preceding impact.	SP, PP	i	i				T	e	RCPD	2
	b. Operations will be phased so that natural topography, distances, and existing vegetation will screen the initial phases of landfill operations. Landforms created by the final phases and completed landfill will approximate background topographic conditions.	SP, SWFP, SOM, CQA	i	i				LC	e	RCPD	1, 2
	c. Truck traffic to the container handling yard will use I-10 and Eagle Mountain Road Extension and Kaiser Road west of Eagle Mountain Road Extension rather than going through Desert Center on Kaiser Road past Lake Tamarisk and other residences.	SP	i				i	LC	e	RCPD, RCDB&S	1, 2

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist
I. Visual, Recreation, and Wilderness Resources

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
3. Potential impacts of the visibility of the landfill from the townsite of Eagle Mountain.	a. The base of the landfill will be at least 1/2-mile away from the nearest residences.	SP	i				i	LC	e	RCPD, RCDB&S	1
	b. Final cover of the landfill mass in later phases of operation will reduce visual contrast as described for the first impact discussed in this section.	SP	i	i				LD	e	RCPD	2
4. Windblown debris and dust from landfill operations could adversely affect the visual quality of the surrounding area.	a. The perimeters of all landfill and waste handling areas will be fenced and regularly patrolled for litter control. Litter will be controlled through waste compaction and daily soil cover. The active working face of the landfill will be limited to no more than 2 acres at a time. If winds increase, litter control personnel will be augmented. In the event of strong winds, the working face will be covered with soil and operations will be suspended. Additional cover will be provided for areas inactive for 180 days.	SWFP, SP, PP, SOM	i	i			i	LC	e	LEA, RCDEH, RCPD, NPS, CIWMB	1, 2
	b. Incoming refuse will be kept in closed containers until transported to the working face of the landfill. Upon deposit, the refuse will be compacted and covered on a daily basis with a minimum 6-inch layer of coarse tailing.	MRF, SWFP, SOM	i	i			i	LC	e	LEA, RCDEH, RCPD, NPS	1, 2
	c. A storm watch and early warning program will be implemented to alert landfill personnel to cover uncovered materials prior to a windstorm.	SP, SWFP, SOM	i	i		i		LC	e	LEA, RCDEH, RCPD	1, 2

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	d. A response plan to provide complete cleanup of accidental spills will be developed, including sufficient equipment and personnel to conduct a cleanup.	SP, SWFP, SOM, HSP	i	i		i		LC	e	LEA, RCDEH, RCPD	1, 2
	e. Landfill personnel will be assigned for litter and debris cleanup onsite as well as in the area between the landfill and Joshua Tree National Park.	SP, SOM	i			i		LC	e	RCPD, NPS	1, 2
	f. Litter control personnel will be designated for direct contact and timely retrieval of stray litter when Joshua Tree National Park observe or receive reports of windborne debris. All litter shall be contained onsite. Litter from landfill in Park will be removed by MRC using methods approved by NPS.	SP, SOM	i			i		LC	e	RCPD, NPS	1, 2
	g. Coarse tailing material onsite will be used for daily cover, reducing potential dust production.	SP, SWFP, SOM	i				i	LC	e	LEA, RCDEH, RCPD	1, 2
	h. Haul road within the project area will be paved, watered, and/or treated w/chemical dust suppressants as needed, as will construction roads for the new railroad spur and Eagle Mountain Road extension.	AC/PO, SP, PP, SOM	i	i				LC	e	SCAQMD, RCPD	
	i. The landfill will operate under a requirement to employ the "Best Available Control Technology" to control fugitive dust, including visible dust, under South Coast Air Quality Management District rules.	AC/PO, SOM	i	i				LC	e	SCAQMD, NPS	2
	j. There will be no windblown litter from the Project detectable in the Park.	**NPS Agreement**					**i**	**T**	e	**NPS**	

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I. Visual, Recreation, and Wilderness Resources

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
5. Potential for significant impacts on views of night skies in the surrounding populated and recreational areas from project night lighting and headlight glare from trucks.	a. Nighttime operations requiring lights, other than landfill liner construction, as required by weather, and public health and safety conditions, will be permitted only in the container handling yard with only low-level security lighting allowed in the landfill area.	SP, PP, SOM	i	i				LC	b	RCPD	2
	b. Lighting required for safety and security will be directed and locational, fixtures will have shields to cut off upward radiation, and light poles will be the minimum height necessary, with the goal of minimizing light spillage.	SP, PP, SOM	i	i				LC	a, b	RCPD	1, 2
	c. Truck traffic will use I-10 and Eagle Mountain Road and its extension to Kaiser Road to reduce visibility from most residences in the area.	SP, SOM	i	i				T	b	RCPD	1, 2
	d. Shield all lights within the Project area to protect the nightsky from light pollution, use low pressure sodium lights, or their functional equivalent, wherever color recognition for safety is not of concern, and use mercury vapor lights in working areas where color recognition is important. All existing lights in the Project area will be retrofitted with low pressure sodium lights.		**i**	**i**				**T**	**a**	**NPS**	**2**

NOTE: Additional mitigation measures that have been added since publication of the Draft EIS/EIR in July 1996 are highlighted in **<bold>.** Additional contractual obligations per the Agreement between the Project proponents and NPS (included in Appendix T of the Final EIS/EIR and shown here as **bold underlined**) and the Memorandum of Understanding with the Southern California Metropolitan Water District (MWD) (Appendix Y and shown here as ***bold italics***) are incorporated into the Mitigation Monitoring and Reporting Program. The specific implementation mechanisms for these obligations will be determined by MRC/Kaiser and NPS and MWD, respectively.

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist I. Visual, Recreation, and Wilderness Resources											
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
6. Land protection.	a. Kaiser/MRC concurrent with the completion of the land exchange, shall irrevocably offer to convey all of the fee lands owned by Kaiser/MRC located within the Park consisting of approximately 190 acres and convey such lands and mining claims to NPS at no cost. NPS shall have until January 1, 2020, to accept all or part of the 190 acres.	NPS Agreement	r					LA	al	NPS	
	b. Provide funds to the Foundation through the Trust. Title to lands acquired from a. Kaiser/MRC within the Park will be conveyed to the United States at no cost.	NPS Agreement	r					T	d	NPS	
	c. Kaiser/MRC shall execute and, at no cost to the United States, simultaneously with execution of any documents associated with the BLM exchange of land or interests in land, should the proposed Eagle Mountain exchange occur, a covenant running with the land.	NPS Agreement	r					LA	a	NPS	

NOTE: Additional mitigation measures that have been added since publication of the Draft EIS/EIR in July 1996 are highlighted in **<bold>.** Additional contractual obligations per the Agreement between the Project proponents and NPS (included in Appendix T of the Final EIS/EIR and shown here as **bold underlined**) and the Memorandum of Understanding with the Southern California Metropolitan Water District (MWD) (Appendix Y and shown here as ***bold italics***) are incorporated into the Mitigation Monitoring and Reporting Program. The specific implementation mechanisms for these obligations will be determined by MRC/Kaiser and NPS and MWD, respectively.

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist I. Visual, Recreation, and Wilderness Resources											
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
7. Additional contractual obligations.	**a. Prior to the commencement of operation of the Project, the Trust will be established and will be legally obligated to pay without restrictions on use to the Foundation, 10 percent of the funds collected by the Trust on an annual basis to be utilized by the Foundation for land acquisition, long-term research, monitoring, and increased NPS resource management capabilities, as the Foundation shall determine, in concurrence with NPS, to be in the best interests of the Park. The Foundation shall account to the Trustees of the Trust on an annual basis and set forth the intended use of the funds for the ensuing year.**	**NPS Agreement**						**T**		**NPS**	
	b. Kaiser/MRC shall provide to the Foundation: (1) an advance of $75,000 per year for a period of 2 years, beginning upon completion of the land exchange with BLM, to be repaid without interest by the Foundation under Section 3.11.1 of this agreement from the first Trust proceeds received by it; and, (2) provide a one-time grant in the amount of $100,000 to the Foundation payable immediately upon commencement of Project operations.	**NPS Agreement**						**T**		**NPS**	

NOTE: Additional mitigation measures that have been added since publication of the Draft EIS/EIR in July 1996 are highlighted in **<bold>.** Additional contractual obligations per the Agreement between the Project proponents and NPS (included in Appendix T of the Final EIS/EIR and shown here as **bold underlined**) and the Memorandum of Understanding with the Southern California Metropolitan Water District (MWD) (Appendix Y and shown here as ***bold italics***) are incorporated into the Mitigation Monitoring and Reporting Program. The specific implementation mechanisms for these obligations will be determined by MRC/Kaiser and NPS and MWD, respectively.

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist I. Visual, Recreation, and Wilderness Resources											
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	c. Provide NPS with 800 square feet of office space and 1,500 square feet of living space at the Kaiser Eagle Mountain Townsite and/or at the Project upon completion of the land exchange, for the entire term of this Agreement.	**NPS Agreement**						**T**		**NPS**	

NOTE: Additional mitigation measures that have been added since publication of the Draft EIS/EIR in July 1996 are highlighted in **<bold>.** Additional contractual obligations per the Agreement between the Project proponents and NPS (included in Appendix T of the Final EIS/EIR and shown here as **bold underlined**) and the Memorandum of Understanding with the Southern California Metropolitan Water District (MWD) (Appendix Y and shown here as ***bold italics***) are incorporated into the Mitigation Monitoring and Reporting Program. The specific implementation mechanisms for these obligations will be determined by MRC/Kaiser and NPS and MWD, respectively.

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist
J. Utilities and Services

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Fire protection impacts from increased demand on fire personnel and equipment and emergency medical services.	a. The landfill will contribute to required fire protection improvements, plans and funding, including a fair share of the operating costs for additional personnel and equipment and additional training for fire personnel to provide the emergency medical service level of training required by the Riverside County Fire Department.	SP, PP					P	LF	c	RCFD, RCPD	1
	b. A detailed plot plan of each planning area will be submitted to the Riverside County Fire Department for review and approval and a written agreement obtained for fire protection services.	PP, GP	i					LB	c	RCFD, RCPD	1
	c. A Fire/Life Safety and Emergency Response Plan will be submitted to the Fire Department.	PP, SWFP			i			LB	c	RCFD, LEA, RCDEH	1
	d. Fire hydrants and water mains will be installed onsite to provide adequate fire flows.	PP, GP	i	i				LB	a	RCFD, RCDB&S	2
	e The landfill will be required to participate in the fire protection impact mitigation program adopted by the Riverside County Board of Supervisors.	SP, PP					c	LB	c	RCFD, RCBS	1
	f. Clearance from the Fire Department will be obtained prior to project use or occupancy of any existing structures within the project boundary of the Eagle Mountain townsite.	SP, PP			c			LC	c	RCFD	1

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist K. Noise											
			Checkpoint								
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Plans	Installed	Completion	Per Event	Discretion	Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
1. Increased noise levels along the Eagle Mountain rail corridor could affect future residential uses in the Eagle Mountain townsite.	a. Adequate buffer distances from the railroad to residences (150 feet for multi-family, 300 feet for single-family residences) will be required in the future Specific Plan for the townsite of Eagle Mountain. ***Similar measures will apply to the MWD Pumping Plant Village***	EMTSP, MWD MOU	i	i			i	PA, PB	a	RCPD	1
2. Truck traffic to the landfill could generate unacceptable noise levels at residences nearby.	a. All landfill-related trucks will be required to use Eagle Mountain Road and Extension and only Kaiser Road west of Eagle Mountain Road Extension. ***Similar measures will apply to the MWD Pumping Plant Village***	SP, MWD MOU	i	i			i	T	b, e	RCPD	2
3. Potential noise impact to residential areas due to landfill operations.	a. Equipment noise from landfill will be approximately 1,000 feet from nearest residential area and shielded from that area by existing berms around the fine tailing ponds.	SP	i					LA, LB, LC	b, e	RCPD	1
	b. Spreading, compacting, and cover of refuse will be conducted only between hours of 7:00 a.m. to 10:00 p.m.	SP, SWFP	i	i			i	LC	b, e	RCPD, LEA, RCDEH	1, 2
	c. Operations will be phased so that the body of the tailing pile nearest the townsite, which serves as a noise barrier, will be retained for as long as possible.	SP	i	i			i	LC	e	RCPD	2
	d. Maintenance activities in Planning Area No. 2 of the Specific Plan shall occur within enclosed structures.	SP, PP	i	i			i	PA, PC	e	RCPD, LEA, RCDEH	2

NOTE: Additional mitigation measures that have been added since publication of the Draft EIS/EIR in July 1996 are highlighted in **<bold>.** Additional contractual obligations per the Agreement between the Project proponents and NPS (included in Appendix T of the Final EIS/EIR and shown here as **bold underlined**) and the Memorandum of Understanding with the Southern California Metropolitan Water District (MWD) (Appendix Y and shown here as ***bold italics***) are incorporated into the Mitigation Monitoring and Reporting Program. The specific implementation mechanisms for these obligations will be determined by MRC/Kaiser and NPS and MWD, respectively.

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist K. Noise											
Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
4. Other noise impacts	a. Kaiser/MRC will provide for the establishment and operation of an ambient noise monitoring program subject to review and approval of NPS. Kaiser/MRC will also adopt new technology whenever feasible to reduce noise from project operations to the maximum extent practicable.	NPS Agreement	i	i	i			T	e	NPS	2
* Local jurisdiction review and approval process											

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Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist
L. Paleontology

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Potential for excavation involving improvements to Eagle Mountain Road and the I-10 interchange to destroy paleontological resources.	a. A paleontological monitoring program will be prepared by a qualified paleontologist and submitted to the RCPD, San Bernardino County Museum, and BLM for review and approval.	SP	i					PA	e	RCPD, BLM, SBCM	1
	b. A pre-excavation survey will be conducted to exposed paleontological resources.	SP				i		PA	c	RCPD, BLM	1
	c. Excavation activities will be monitored by a qualified paleontologist.	SP				i		PB	e	RCPD, BLM	1
	d. Recovered fossils will be prepared to a point of identification and stabilization.	SP			i			PD	e	SBCM	1, 2
	e. Recovered specimens will be identified, curated, and stored in an established repository.	SP			i			PD	c	SBCM	1, 2
	f. A report of findings will be prepared and submitted to the County of Riverside, BLM, and the San Bernardino County Museum for approval.	SP					r	PD	a	RCPD, BLM, SBCM	2

NOTE: Additional mitigation measures that have been added since publication of the Draft EIS/EIR in July 1996 are highlighted in **<bold>.** Additional contractual obligations per the Agreement between the Project proponents and NPS (included in Appendix T of the Final EIS/EIR and shown here as **bold underlined**) and the Memorandum of Understanding with the Southern California Metropolitan Water District (MWD) (Appendix Y and shown here as ***bold italics***) are incorporated into the Mitigation Monitoring and Reporting Program. The specific implementation mechanisms for these obligations will be determined by MRC/Kaiser and NPS and MWD, respectively.

Eagle Mountain Landfill and Recycling Project Conditions of Approval and Mitigation Monitoring and Reporting Program Checklist
M. Energy Consumption/Generation (These are Components of the Project Design)

Potential Environmental Effects	Mitigation Measures and Additional Obligations	Conditional Authority	Checkpoint					Monitoring Period	Reporting Frequency	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Potential for consuming more diesel fuel per day than landfills located closer to the waste sources.	a. Diesel locomotives on the Eagle Mountain railway will be shut down when the engines are not needed for an hour or more and will receive regular preventative maintenance, in accordance with manufacturer's recommendations.	SP	i	i				LC	e	RCPD	2
	b. Whenever available, elective versions of landfill equipment including overhead cranes, pugmills, crushers, and conveyors will be used. Where not available, alternative fuel technology will be used depending on air permitting standards.	SP, AC/PO	i	i				LC	e	RCPD, SCAQMD	1, 2
	c. When the flare gas generation rate exceeds 5 million cubic feet per day (MCFD), an analysis of the technical and economic feasibility of recovering energy from the flared landfill gas will be conducted.	AC/PO	i	i			i	LC, LE	e	SCAQMD, USEPA	1, 2
	d. If the analysis indicates that energy recovery is feasible, energy recovery facilities shall be installed and operating before the landfill gas generation rate exceeds 10 MCFD.	AC/PO	i	i			i	LC, LE	e	SCAQMD, USEPA	1, 2

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Appendix N
Bighorn Sheep Report

BIGHORN SHEEP MONITORING PROGRAM FOR THE EAGLE MOUNTAIN LANDFILL PROJECT

PHASE ONE REPORT

Submitted To:
Mine Reclamation Corporation



Submitted By:

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July 1996

ABSTRACT

Mine Reclamation Corporation has proposed transforming the closed Eagle Mountain Mine into a regional landfill capable of accepting up to 20,000 tons of inert, solid waste, per day. The bighorn sheep monitoring program was initiated to provide seasonal movement data for the Eagle Mountain bighorn sheep herd, and address possible mitigation measures designed to offset the loss of numerous temporary water sources that will be inaccessible to bighorn once the landfill is constructed. Accordingly, 37 bighorn sheep were fitted with radio collars and relocated approximately every 10 days via aerial radio telemetry over a 2 year period.

Analysis of telemetry locations shows that 2 non-interactive ewe sub-populations inhabit the Eagle Mountains, one in the northern region near the mine, and one in the southern region near Lost Palms Oasis. A 1994 population estimate for the Eagle Mountain bighorn sheep herd, encompassing both sub-populations, was 68 ± 28 individuals, which was much larger than previously estimated. Mean annual home range for ewes in the northern sub-population was 70.18 km^2 , while mean annual home range for ewes in the southern sub-population was 53.47 km^2. Both of these estimates are substantially larger than most annual ewe home ranges reported in the sheep literature. Mean annual ram home range, 119.35 km^2, was consistent with ram home ranges reported in the literature. During the study a ram was documented moving from the Eagle Mountains to the Coxcomb Mountains, located approximately 15 km to the northeast. This was the first verified inter-mountain movement documented between the Eagles and The Coxcombs, and lends support to the theorized Eastern Mojave Bighorn Sheep metapopulation. This inter-mountain movement is not only important because of its potential for gene flow, but also because

of the genetic make-up of the Eagle Mountain herd. Genetic testing of the captured sheep revealed that all sheep sampled in the Eagle Mountains were polymorphic for 5 Major Histocompatibility Complex (MHC) loci, and the herd possessed one unique allele that has not been recorded in any adjacent herds. Thus, the Eagle Mountain sheep herd appears to be relatively heterozygous at these loci, and thus may have a relatively high degree of fitness.

There are 4 viable natural water sources available to bighorn sheep in the Eagle Mountains: Buzzard Spring and Eagle Tank in the north, and Summit Spring and Lost Palms Oasis in the south. Buzzard Spring is a year-around spring that serves as the primary water source in the northern Eagle Mountains, while Eagle Tank is an ephemeral spring that dries up during summer months. Lost Palms Oasis and Summit Spring are both permanent water sources that together comprise the major water source in the southern Eagle Mountains.

Due to the elimination of numerous temporary water sources, it is likely that landfill construction and operations will cause a shift in the movements of the northern ewe sub-population. Accordingly, it is recommended that Eagle Spring be evaluated to determine the potential for increasing its flow and producing a year-around water source. Depending on the feasibility of altering Eagle Spring, an additional water unit may need to be placed in the western portion of the Eagle Mountains to offset lost watering opportunities during the critical summer months. Finally, continued sheep monitoring will need to be conducted to ensure that inter-mountain travel between the Eagle Mountains and the Coxcomb Mountains is still possible, and that the northern lambing areas are not detrimentally affected by landfill operations.

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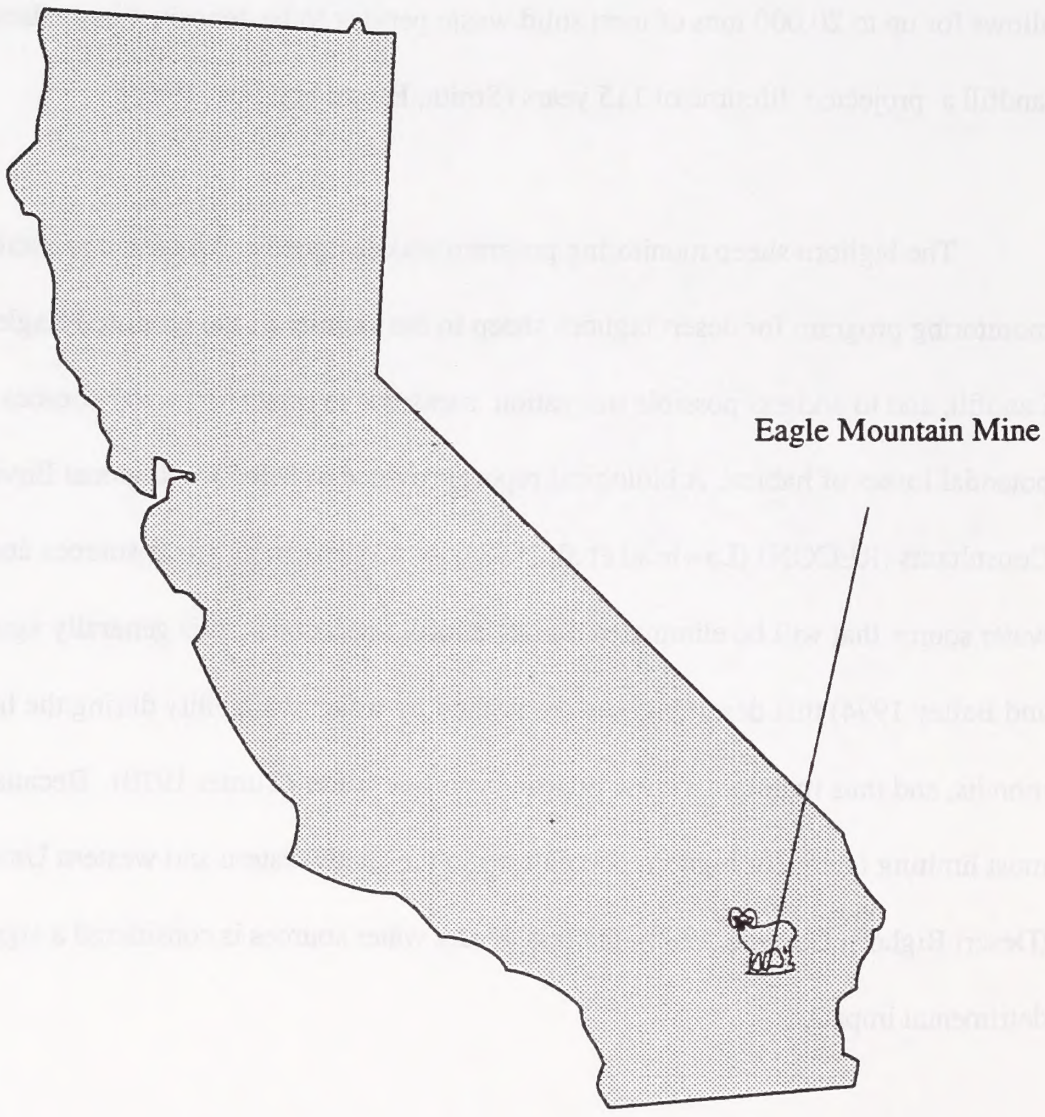
INTRODUCTION

In the mid 1980's, Mine Reclamation Corporation (MRC) proposed establishment of a class III landfill at the Eagle Mountain Mine, Riverside County, CA (Figure 1), for disposal of inert solid waste and for retrievable storage of recyclable materials contained in municipal wastes. The initial proposal called for a 4,965 acre project including 6 planning areas, a recyclable material storage area, a fill material storage area, and an open space area. The original design allows for up to 20,000 tons of inert solid waste per day to be deposited in the landfill, giving the landfill a projected lifetime of 115 years (Smith, Peroni and Fox, 1991).

The bighorn sheep monitoring program was designed and initiated to establish a monitoring program for desert bighorn sheep in the vicinity of the proposed Eagle Mountain Landfill, and to address possible mitigation measures to offset lost water sources and any potential losses of habitat. A biological report provided to MRC by Regional Environmental Consultants (RECON) (Lawhead et al, 1991), lists 3 permanent water sources and one temporary water source that will be eliminated due to landfill operations. It is generally agreed (McCarty and Bailey 1994) that desert bighorn are limited by water availability during the hot, dry summer months, and thus maintain a close proximity to free water (Turner 1970). Because water is the most limiting factor for bighorn populations in the southwestern and western United States (Desert Bighorn Council, 1980), the loss of any water sources is considered a significant detrimental impact.

Low elevation mountains such as the Eagles typically support relatively small herds of

Figure 1. Regional Map



bighorn sheep that, by themselves, would not be genetically viable for long-term survival. These herds require periodic interaction with individuals from herds in adjacent mountain ranges to offset genetic drift and inbreeding. Thus access to movement corridors between subpopulations is a primary management concern. Harris (1984) noted that species occurring in small populations are the most vulnerable to extirpation. Berger (1990) showed that small, disjunct populations are more susceptible to extinction than larger populations, and hypothesized that such susceptibility is due in part to a genetic "buffer" afforded to larger populations. Bleich et al (1990) directly addressed the impacts on-going habitat fragmentation may have on desert bighorn populations. They agreed that the three major risks of fragmentation proposed by Wilcox and Murphy (1985); 1.) Sub-division, size reduction, or destruction of demographic units; 2.) Loss of potential immigrants; and 3.) Impedance of immigration caused by alteration of natural habitat, are all applicable to the conservation efforts of desert bighorn. Thus desert bighorn populations need to be managed not in a singular, disjunct fashion, but in a conglomerate fashion. A perturbation to resources in the Eagle Mountains such as elimination of crucial water sources, or severing of movement corridors, could have detrimental impacts that affect not only the Eagle Mountain sub-populations, but also extend to populations in adjacent mountain ranges.

This research program was designed to ensure that the landfill and its operating procedures will not negatively impact the Eagle Mountain bighorn sheep herd, or surrounding herds that together may comprise an East-Mojave metapopulation. It is believed that by identifying areas of heavy use, specialized areas such as lambing grounds, and home ranges of individual sheep, appropriate recommendations can be made concerning mitigation measures and future monitoring efforts.

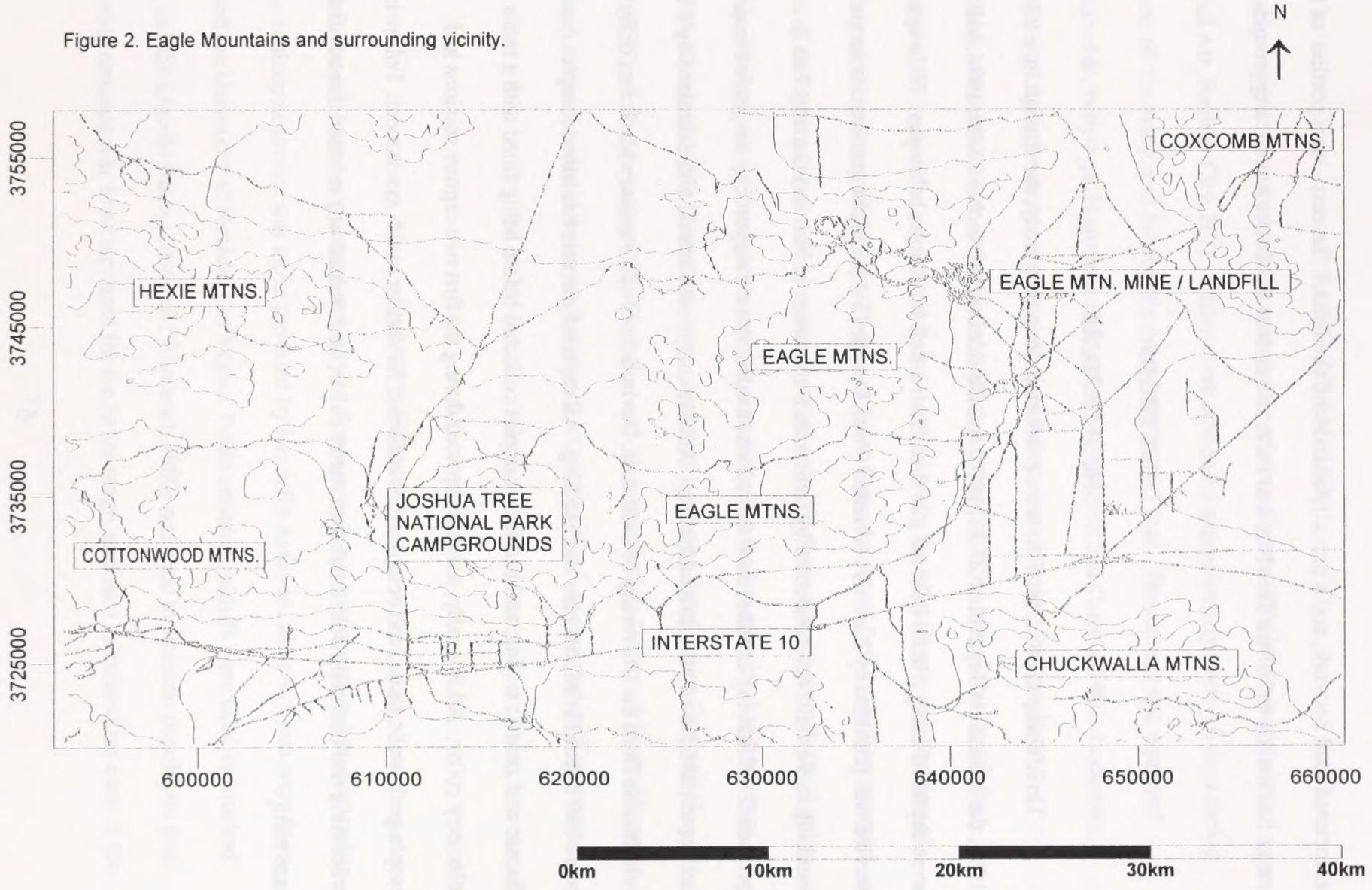
Phase I of the monitoring program was based on the following 5 research objectives:

1. Capture and equip 30 bighorn sheep in the Eagle Mountains with radio-telemetry collars.
2. Determine individual home ranges, seasonal use areas, and inter-mountain movements as related to the proposed landfill site.
3. Describe and quantify physical and biotic attributes of the study area.
4. Identify relationships of bighorn movements and movement corridors and their relationships to the proposed landfill site.
5. Study genetic relationships of the Eagle Mountain herd to herds in the Little San Bernadino and Coxcomb Mountains.

STUDY SITE

The Eagle Mountains are located on the northern edge of the Colorado Desert, in Riverside County, California, on the south-eastern edge of Joshua Tree National Park (JTNP), formerly Joshua Tree National Monument (Figure 2). The Eagle Mountains lie between the Coxcomb Mountains to the east, and the Cottonwood and Hexie Mountains to the west, and are bounded by a expansive basin on the north, and by Interstate-10 on the south. The mountain range is composed of two major sections, one lying primarily north-south, and the other lying primarily east-west. The north-south portion of the range contains the Eagle Mountain Mine, and proposed landfill site. The mine complex is composed of three major excavation pits, an

Figure 2. Eagle Mountains and surrounding vicinity.



associated road network, and a partially-abandoned townsite. The east - west portion of the range lies mainly in Joshua Tree National Park, and ends at the Cottonwood Campground.

METHODS

SHEEP CAPTURE

Three sheep capture sessions were conducted during the study, the first on June 23-24 1993, the second on September 27-28, 1993, and the third on September 27-28, 1994. All sheep were captured using a hand-held net gun fired from a Bell Jet-Ranger helicopter. Helicopter service was provided by Landell's Aviation (Palm Desert, CA) while net gun operations and sheep handling in the field was conducted by California Department of Fish and Game (CDFG) personnel. Following capture, each animal was loaded into a transport bag suspended under the helicopter, and flown back to a base camp. At base camp, each animal was examined by a veterinarian from the University of California, Davis, School of Veterinary Medicine, or by CDFG personnel trained in animal care and handling. All captured animals had blood samples drawn for disease and genetic testing, and had fecal samples collected before being fitted with a radio telemetry collar. Additionally, animals captured during the first two capture sessions had esophageal swabs taken, and ectoparasites collected for further health assessment. Following processing and outfitting with a radio telemetry collar, each animal was released directly from base camp.

RADIO TELEMETRY

Sheep monitoring and relocation was conducted via a Cessna 206 fixed-wing aircraft (Lake Mead Air, Boulder City, NV). Flights were scheduled approximately every 10 days during the first year of the study, and bi-monthly during the second year. The aircraft was equipped with a removable, belly-type H antenna as described by Lecount and Carrel (1980). Locations were obtained by flying over the range in a rough search pattern listening for signals on a programmable scanner/receiver (Telonics Inc., Mesa Arizona). Once a signal was heard, the observer determined which frequency was being detected while the pilot flew in the direction of strongest signal reception until the signal began to fade. Once the signal faded, the pilot returned to the area of strongest reception and began an inward spiral to determine the signal's focal point. The focal point, the point of strongest reception, was plotted as the location for that frequency (Mech 1983, Kenward 1987). Locations were plotted by hand on United States Geological Survey (USGS) 15 minute maps, 1:62,500 scale, and later recorded as Universal Trans-Mercator coordinates. Aerial locational errors were assumed to average 4 ha^2, as reported by Krausman (1984).

Population Estimate

A helicopter-based population survey was flown prior to capture operations on September 27, 1994. Helicopter service was again provided by Landell's Aviation, and observers were from CDFG, and the University of Nevada, Las Vegas. Radio collared animals were used as "marked" animals, and the Lincoln Index (Davis and Winstead, 1980) was used to estimate population size. A population estimate was first calculated for the entire range, and then calculated for each of the

ewe sub-populations.

HOME RANGE

Sheep home ranges were calculated from telemetry relocation data, using 100% of locations, with the minimum convex polygon method. Home range areas were calculated with the CALHOME home range program, developed by the U.S. Forest Service Pacific Southwest Research Station, and CDFG. Home ranges were calculated on a yearly and seasonal basis. Seasons were defined as December - February (Winter), March - May (Spring), June - August (Summer), and September- November (Fall). Because sub-division of the data set into seasons causes a severe reduction in the number of locations available to calculate home range, data from both years were combined to increase sample size. An un-paired t-test (Zar, 1984) was used to determine if differences existed between the home ranges for each year, before the two data sets were combined and analyzed. Annual home ranges were calculated for all animals, but seasonal home ranges were only calculated for animals having a minimum of 9 locations for any given season. An ANOVA with repeated measures (Zar, 1984) was used to determine if any seasonal differences existed in the home range data.

PHYSICAL ATTRIBUTES

Land Surface Ruggedness Index

A Land Surface Ruggedness Index (LSRI) was developed within the Geographic Information System (GIS) program GRASS (U.S. Army Corps of Engineers), following Ebert and Douglas (1993). Digital Elevational Model (DEM) data were transformed into a usable

GRASS format from the Terrain Analysis Package (TAP) (Softwright, Aurora, Colorado) format. TAP data were then transformed from 3 arc-second resolution 90 m x 70 m , and projected on a 100 m x 100 m grid to facilitate LSRI calculations. The ruggedness index for each one hectare cell was calculated by summing the percent slope of that cell and slope values of its neighboring 8 cells. The sum of slope values calculated for each 9- cell block served as the index of ruggedness for the center cell of that block.

Distance From Permanent Water

In May of 1994 a helicopter survey of all water sources in the Eagle Mountains was flown to determine the status of available surface water in the range. The distance bighorn were found from permanent water was calculated by overlaying a GRASS file depicting all water sources known to be available during the season under investigation onto a map of sheep locations for that season. Distances were calculated from each sheep location to the nearest water source. Distance from permanent water was calculated seasonally because Eagle Spring/Tank, a natural spring at the southwest end of Placer Canyon, appears to dry up during the hot summer months, and is thus not an adequate source of water in the summer. Additionally, in order to avoid ambiguity, the artificial water unit located at the town water tank and maintained by Kaiser- Eagle Mountain Mine personnel, was not included in distance from water measurements. Construction of a second additional water tank immediately south of the first, was undertaken during the summer of 1994, creating constant human presence and disturbance during all hours of the day and night. It is believed this presence may have had a significant impact on sheep use of the water source, thus introducing an un-controllable human disturbance.

Sheep Movements Relative To The Proposed Landfill

To assess sheep movements relative to the proposed landfill site, a contour map was constructed using the SURFER graphing program (Golden Software, Golden, Colorado). The map consists of elevational contours and a digitized outline of the proposed landfill site boundary, including individual phases of the landfill (CH_2M Hill, in press), and the existing railroad line leading to the townsite. Yearly and seasonal sheep locations were plotted on the contour maps, and evaluated with respect to relative locations, movements, and possible interactions/conflicts.

GENETICS

All genetic and disease testing was performed by Dr. Walter Boyce of the University of California, Davis, School of Veterinary Medicine. Twelve samples from the first sheep capture, and 17 samples from the second sheep capture were sent to the laboratory for testing. Health testing included hematology tests, blood serum chemistry, infectious disease serology, virus isolation, tick identification, and Pasteurella isolates. Genetic testing was done via DNA extraction from white blood cells, and subsequent analysis for polymorphisms at five Major Histocompatibility Complex (MHC) loci. Further, more detailed, methodology can be obtained from Dr. Walter Boyce, or from CDFG officials.

RESULTS

SHEEP CAPTURE

The first sheep capture, June 23-24, 1993, yielded 11 ewes and 1 ram, while the second sheep capture, September 27-28, 1993, yielded an additional 10 ewes and 7 rams (Table 1). The

third and final capture was conducted on September 27-28, 1994, with the sole intent of capturing additional rams to facilitate detection and monitoring of possible inter-mountain and large-scale movements. The capture added an additional 1 ewe and 7 rams to the study population (Table 1). Animal injury and death rates were very low during all 3 capture sessions. A 3-year old ram died of unknown causes sometime between his capture on June 24, 1993, and the first telemetry flight on July 23, 1993. It is assumed that because mortality occurred shortly following capture, the death is attributable to capture myopathy, a condition of renal failure brought on by severe heat stress accompanied by a muscular accumulation of lactic acid. The only other injuries to occur, also occurred during the first capture session. Two ewes sustained injuries during the chase prior to capture; one dislocated a tarsus and the other punctured an eye. Both animals were treated in the field by a veterinarian and released. Early telemetry flights indicated both ewes were alive and had no apparent mobility problems. Their status was confirmed on May 18, 1994 during a helicopter survey when both ewes were located via radio telemetry and observed; neither ewe appeared to be suffering from a lack of mobility.

Table 1. Sheep capture summary for the Eagle Mountain Bighorn Monitoring Program, Riverside County, CA, from June 1993 through September 1994.

COLLAR FREQUENCY	SEX	AGE	LEFT TAG	RIGHT TAG	AREA	CAPTURE DATE
164.029	Female	5.0	Metal 1033	Blue 768	North	June 1993
164.221	Male	8.0	Metal 3163	Yellow 190	North	Sept. 1994
164.310	Female	2.0	Metal 1037	Blue 749	North	June 1993
164.311	Female	6.0 +	Metal 3170	Yellow 200	South	Sept. 1994
164.360	Male	3.0	Metal 3165	Yellow 192	North	Sept. 1994

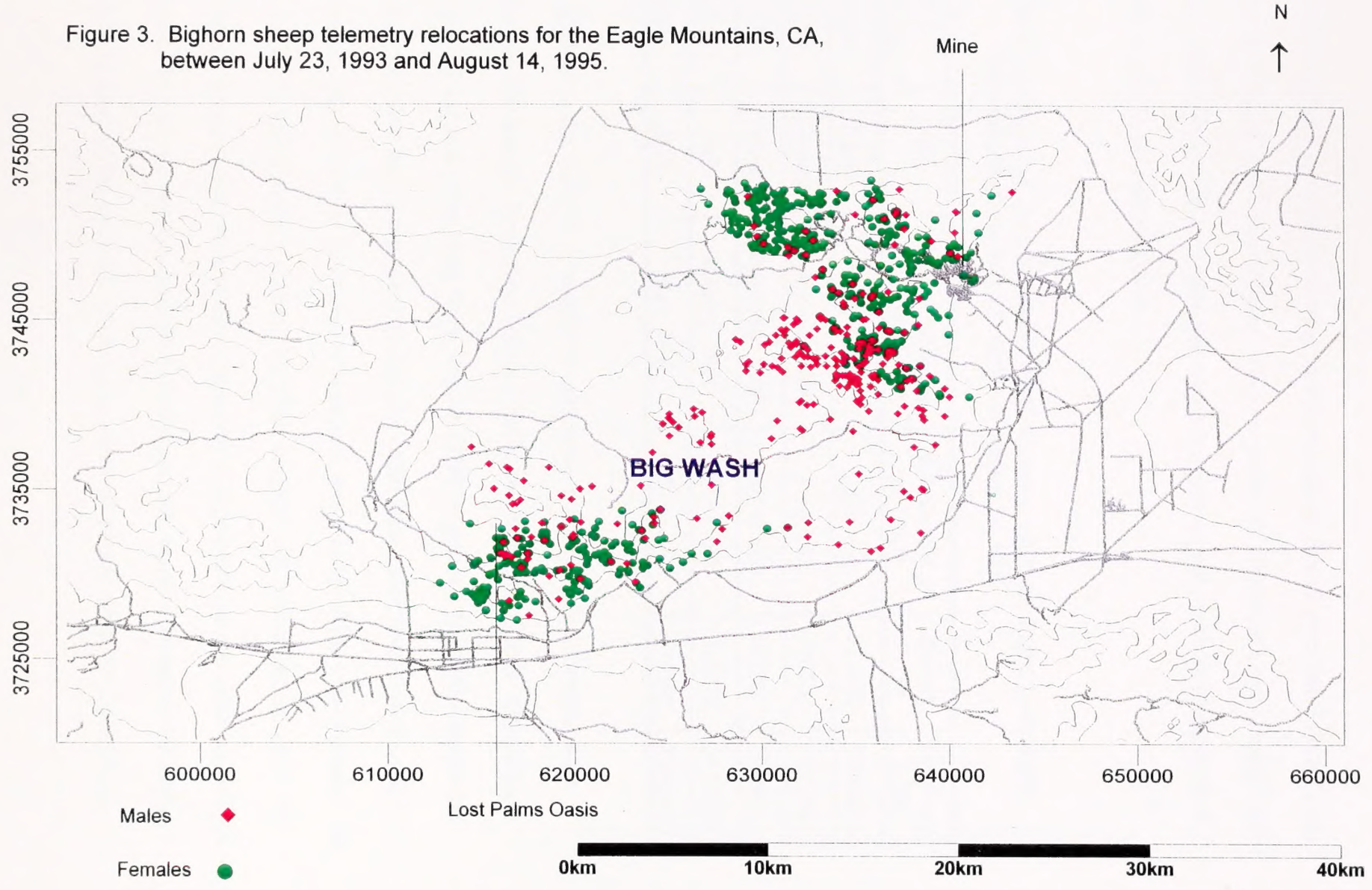
164.379	Male	8.0 +	Metal 3166	Yellow 193	North	Sept. 1994
164.410	Female	4.0	Metal 2384	Red 301	South	Sept. 1993
164.430	Male	8.0 +	Metal 3159	Yellow 185	North	Sept. 1994
164.460	Male	3.0	Metal 2394	Green 568	North	Sept. 1993
164.510	Male	8.0	Metal 2386	Green 555	North	Sept. 1993
164.519	Male	5.0	Metal 2389	Green 563	North	Sept. 1993
164.529	Male	4.0	Metal 2383	Red 625	South	Sept. 1993
164.539	Female	6.0	Metal 2382	Red 624	South	Sept. 1993
164.560	Male	3.0	Blue 747	Metal 1039	South	June 1993
164.560	Male	4.0	Metal 3158	Yellow 184	North	Sept. 1994
164.580	Female	4.0	Metal 2385	Red 604	South	Sept. 1993
164.590	Male	5.0	Metal 2379	Red 613	North	Sept. 1993
164.600	Male	4.5	Metal 2381	Red 368	North	Sept. 1993
164.610	Male	3.0	Metal 2395	Green 566	South	Sept. 1993
164.630	Female	4.0	Metal 2388	Green 562	North	Sept. 1993
164.660	Female	9.0	Metal 1036	Blue 728	North	June 1993
164.680	Female	4.0	Metal 1030	Blue 727	North	June 1993
164.710	Female	9.0	Metal 2380	Red 369	South	Sept. 1993
164.728	Female	6.0	Metal 1034	Blue 750	North	June 1993
164.840	Female	6.0	Metal 1032	Blue 765	North	June 1993
164.860	Female	6.0	Metal 1035	Blue 766	North	June 1993
164.870	Female	5.5	Metal 2396	Green 564	North	Sept. 1993
164.880	Male	5.0	Metal 3162	Yellow 189	North	Sept. 1994
164.890	Female	2.5	Metal 2391	Green 560	North	Sept. 1993
164.910	Female	8.0	Metal 1031	Blue 751	North	June 1993
164.940	Female	Adult	Blue 746	Metal 1040	South	June 1993

164.960	Female	3.0	Blue 744	Metal 1043	North	June 1993
165.049	Female	1.0	Blue 743	Metal 1042	South	June 1993
165.070	Female	2.0	Metal 2390	Green 561	North	Sept. 1993
165.549	Female	7.0	Metal 2393	Green 565	North	Sept. 1993
165.799	Male	3.0	Metal 3164	Yellow 191	South	Sept. 1994
165.809	Female	2.0	Metal 2387	Green 567	North	Sept. 1993

RADIO TELEMETRY

Between August 20, 1993 and August 14, 1995, 53 monitoring flights were flown over the Eagle Mountains to relocate radio-collared animals. During these flights, 818 groups of radio-collared sheep were relocated, with the number of collared animals in each of these groups ranging from 1-8, giving a total of 1,361 relocations. Because of its preliminary nature, the first flight on July 23, 1993 is not included in the data set, although the sheep locations from that flight are included in Figure 3. The most striking result was that although rams appear to use the entire mountain range, and can inhabit either the south, the north, or both regions (Figure 3), ewes exist in two distinct sub-populations that do not appear to intermingle (Figure 3). One sub-population is located in the northern section of the Eagle Mountains, inhabiting areas surrounding the mine while the other sub-population is located in the southern section of the Eagle Mountains, inhabiting areas near Lost Palms Oasis, and Summit Spring. The dividing line between the two sub-populations is a large wash named Big Wash, that runs east to west bisecting the two sections of the Eagle Mountains (Figure 3).

Figure 3. Bighorn sheep telemetry relocations for the Eagle Mountains, CA, between July 23, 1993 and August 14, 1995.



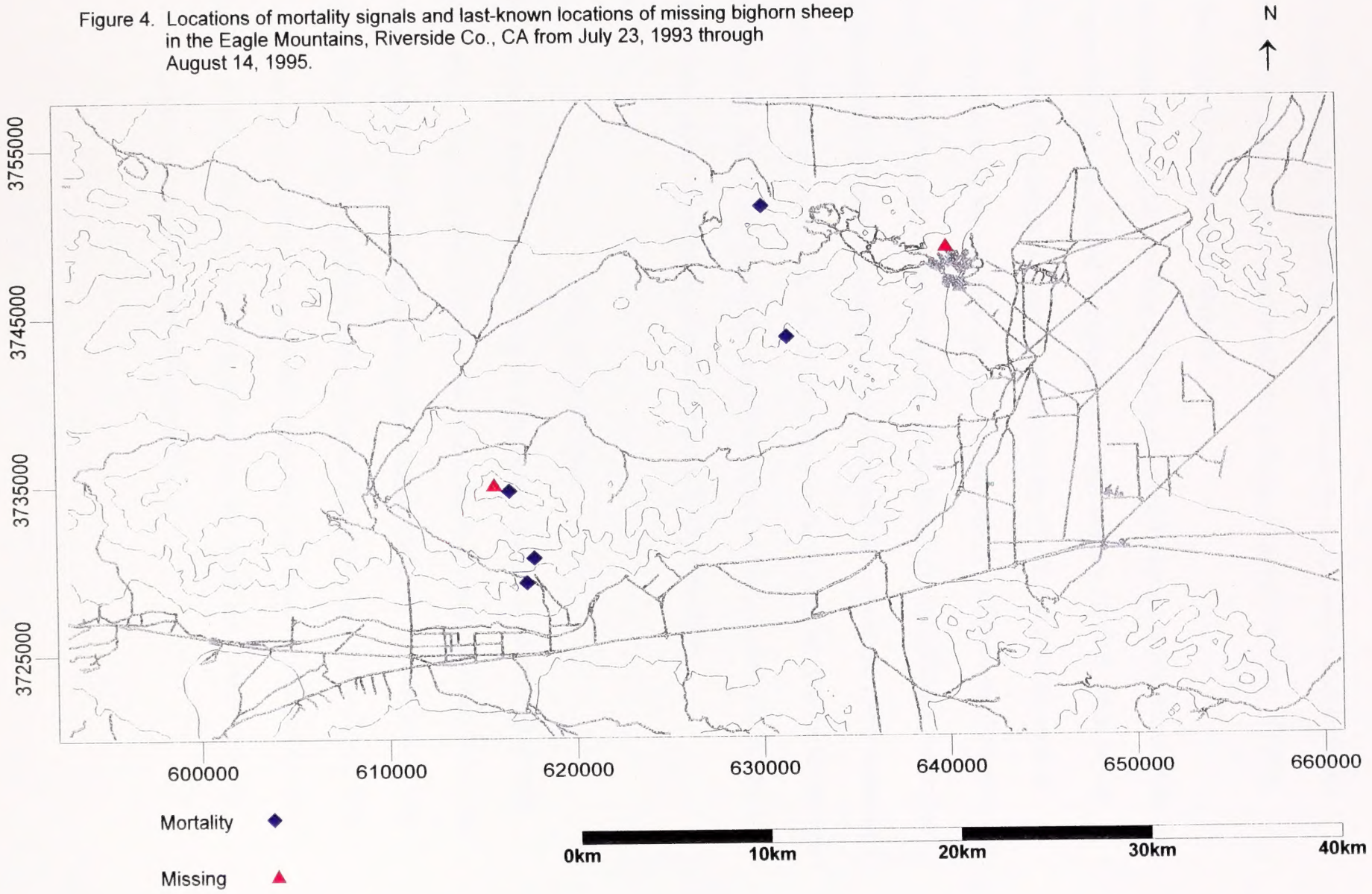
Mortality signals were detected during monitoring flights from 2 ewes and 3 rams (Table 2 and Figure 4). None of the causes of death were ever positively ascertained, even though 3 of the 5 collars were retrieved. The 2 collars that were not retrieved were both on National Park Service land, in remote, inaccessible areas.

Table 2. Listing of all mortality signals received during telemetry flights in the Eagle Mountains between July 23, 1993 and August 14, 1995.

Collar Frequency	Sex	Date of Mortality Signal	Estimated Age At Death	Easting UTM	Northing UTM
164.560	Male	July 1993	3 yrs. old	617800	3730675
164.310	Female	September 1994	3 yrs. old	630221	3751440
164.710	Female	September 1994	10 yrs. old	617391	3729211
164.529	Male	January 1995	5 yrs. old	616500	3734650
164.460	Male	May 1995	5 yrs. old	631500	3743700

In addition to the 5 deaths, 2 additional rams were lost, and never relocated. Ram 164.600 (5 years old) was last located on June 3, 1994, in the far western Eagle Mountains, approximately 5.7 km east of the Pinto Basin Road in JTNP (Figure 4). It is believed that this disappearance may have been due to a malfunctioning collar because for several weeks prior to the final location, this ram was in the company of another ram, and following loss of contact, the other ram was easily and repeatedly located. This fact, coupled with several unsuccessful wide ranging searches for the missing ram, leads to the tentative hypothesis that the collar on 164.600 malfunctioned. The second missing ram, 164.610 (4 years old), was last located on November 23, 1994 directly north of the east mine pit, in the presence of several other sheep (Figure 4).

Figure 4. Locations of mortality signals and last-known locations of missing bighorn sheep in the Eagle Mountains, Riverside Co., CA from July 23, 1993 through August 14, 1995.



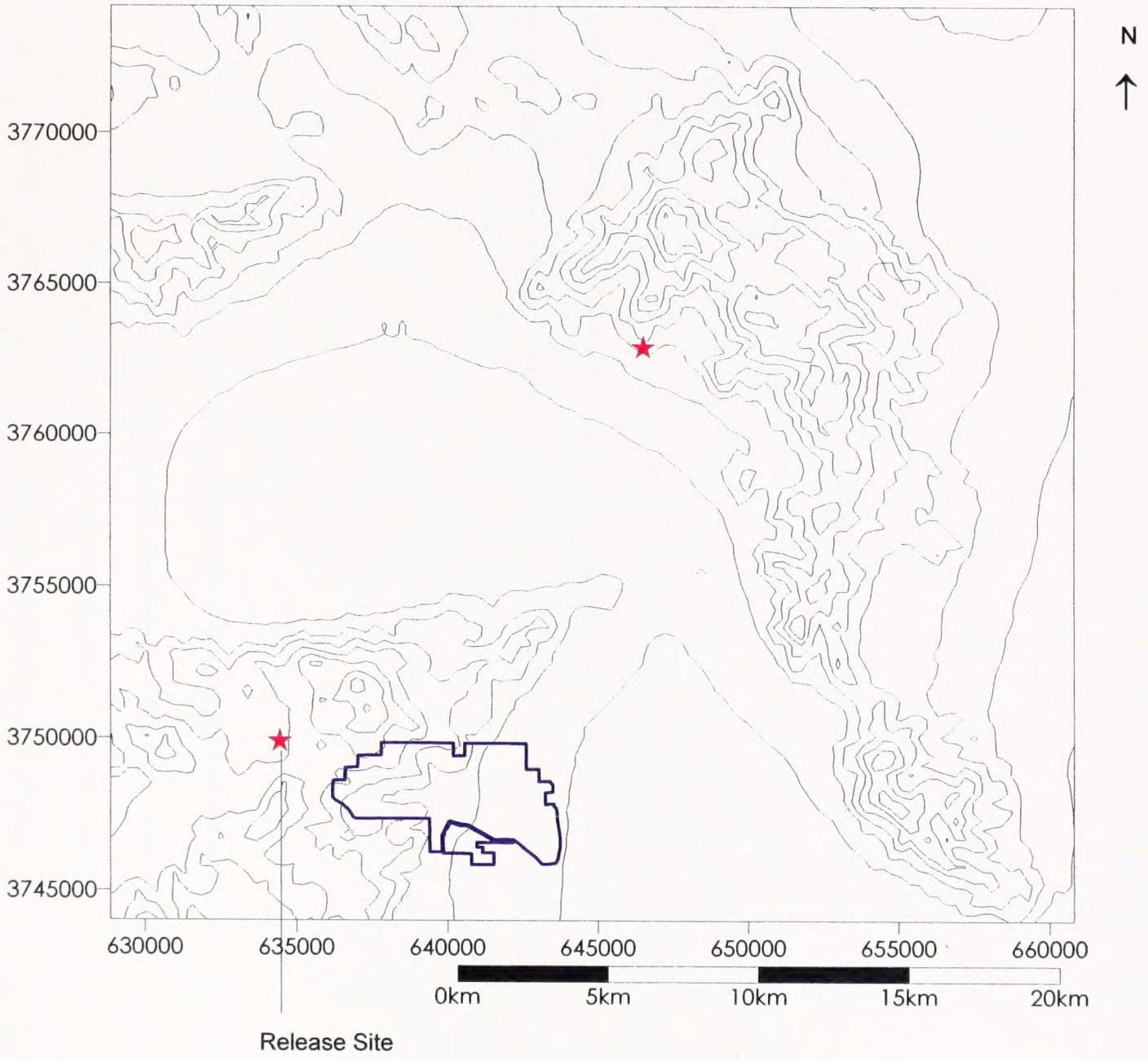
Subsequent searches failed to re-locate the ram, even when the search was extended into the nearby Coxcomb Mountains. The reason for this ram's disappearance is unknown. To date, neither of these signals has again been detected.

After release from the capture base camp near the central mine pit in September 1994, ram 164.360 (3 years old) was not located or detected again until January 17, 1995, when he was located in the Coxcomb Mountains (Figure 5), approximately 15 - 20 km from his point of capture. It was hypothesized that this ram spent most of his time in the Coxcomb Mountains, and travelled to the Eagle Mountains for the rut season. It was further hypothesized the ram crossed between ranges utilizing the peninsula that spans more than half-way across the valley separating the two ranges, and that he would make the crossing again in the summer of 1995 for the next rut season. But, as of the date of this report, the ram has remained in the Coxcomb Mountains, and his movements have given no indication of returning to the Eagle Mountains.

Population Estimate

The number of sheep observed during the population survey was 34, with 14 of these having radio collars. These numbers indicate that prior to the final capture session, 41% of the Eagle Mountain bighorn sheep population was radio collared. Using the Lincoln Index (Davis and Winstead, 1980) the 1994 population estimate for the Eagle Mountain bighorn sheep herd is 68+/- 28 individuals. This estimate is substantially larger than any previous estimates by CDFG (S. Torres, pers. comm.). Because this herd is broken into two major but separate ewe sub-populations, estimates were made for each sub-population.

Figure 5. Location of ram 164.360 on January 17, 1995
in the Coxcomb Mountains, Riverside Co., CA.



The northern ewe sub-population has a population estimate of 21+/- 9 individuals, and the southern ewe sub-population has an estimate of 17 ± 9 individuals.

HOME RANGE

Annual

No significant differences were found in home range size between years (un-paired t-test, 95% confidence level [Zar 1984]), thus locations from both years were combined for analysis. Mean annual home range of the northern ewe sub-population, 70.18 km^2 ± 16.45 km^2 (s.d.) (Table 3), appears to be larger than the mean annual home range of the southern ewe sub-population, 53.47 km^2 ± 41.65 km^2 (Table 4). However, an un-paired t-test at a 95% confidence level fails to reject the null hypothesis that the means are equal, thus, there is no statistical difference between home range sizes of the northern and southern ewe groups. There was a significant difference between mean annual ram home range, 119.35 km^2 ± 76.19 km^2 (Table 5), and mean annual home range of all ewes combined, 64.86 km^2 ± 28.23 km^2 (unpaired t-test, $P < .05$).

Seasonal

Ewe home ranges were examined to determine if home range size differed between seasons. Because of the natural division, the 2 ewe sub-populations were analyzed separately. The mean home range size differed significantly between seasons, (ANOVA with repeated measures, 95 % confidence level). For northern ewes, mean summer home range was significantly smaller than mean fall or mean spring home range. Home ranges for southern ewes

did not differ between seasons.

Table 3. Yearly and seasonal ewe home ranges for the northern ewe sub-population in the Eagle Mtns., Riverside Co., CA, from August 20, 1993 through August 14, 1995. Seasonal home ranges only calculated for animals with 9+ locations in that season.

Frequency	*Yearly*	n	*Fall*	n	*Winter*	n	*Spring*	n	*Summer*	n
164.029	*117.10*	51	*78.82*	12	*34.25*	12	*61.04*	12	*16.38*	15
164.310	*54.37*	30	*33.80*	9	*5.60*	4	*12.80*	8	*6.77*	9
164.630	*65.35*	46	*24.30*	9	*24.54*	11	*32.12*	13	*28.18*	13
164.660	*62.48*	51	*18.86*	12	*19.34*	11	*33.04*	13	*26.14*	15
164.680	*47.76*	52	*26.15*	12	*10.03*	11	*25.49*	13	*14.02*	16
164.728	*74.92*	49	*41.07*	12	*21.85*	11	*48.41*	13	*20.18*	13
164.840	*80.68*	48	*50.10*	12	*65.34*	10	*50.20*	11	*7.19*	15
164.860	*79.95*	53	*45.22*	12	*36.98*	12	*33.92*	14	*19.15*	15
164.870	*58.03*	46	*33.03*	9	*11.22*	10	*30.28*	14	*22.39*	13
164.890	*57.58*	49	*27.95*	9	*19.25*	12	*26.39*	14	*33.87*	14
164.910	*72.79*	52	*30.83*	12	*23.49*	12	*13.57*	14	*27.33*	14
164.960	*57.29*	50	*26.49*	12	*15.38*	12	*24.83*	13	*9.77*	13
165.070	*81.29*	48	*31.36*	9	*50.63*	11	*38.13*	14	*10.45*	14
165.549	*61.79*	44	*15.01*	6	*20.79*	10	*49.66*	14	*35.99*	14
165.809	*81.25*	44	*7.12*	6	*63.34*	11	*40.05*	13	*12.85*	14
n	*15*		*15*		*15*		*15*		*15*	
mean	*70.18*		*36.10*		*29.75*		*36.22*		*19.38*	
s.d.	*16.45*		*14.90*		*17.46*		*12.19*		*9.10*	

Table 4. Yearly and seasonal ewe home ranges for the southern ewe sub-population in the Eagle Mtns, Riverside Co., CA, from August 20, 1993 through August 14, 1995. Seasonal home ranges only calculated for animals with 9+ locations in that season.

Frequency	*Yearly*	n	*Fall*	n	*Winter*	n	*Spring*	n	*Summer*	n
164.311	*25.15*	19	*0.0*	nc	*nc*	nc	*nc*	nc	*nc*	nc
164.410	*31.51*	46	*9.36*	9	*9.41*	10	*22.04*	13	*21.18*	14
164.539	*51.10*	44	*23.88*	9	*16.16*	10	*15.64*	11	*23.69*	14
164.580	*153.90*	43	*28.59*	9	*83.63*	9	*24.05*	12	*27.93*	13
164.710	*36.26*	27	*9.97*	6	*8.12*	5	*12.87*	7	*15.42*	9
164.940	*39.86*	51	*18.53*	12	*18.42*	11	*28.56*	13	*25.90*	15
165.049	*36.52*	47	*23.05*	12	*7.72*	9	*14.86*	11	*21.60*	15
n	*7*		*5*		*5*		*5*		*6*	
mean	*53.47*		*20.68*		*27.07*		*21.03*		*22.62*	
s.d.	*41.65*		*6.50*		*28.56*		*5.18*		*3.98*	

nc = not calculated

Table 5. Yearly and seasonal ram home ranges in the Eagle Mtns., Riverside Co., CA, from August 20, 1993 through August 14, 1995. Seasonal home ranges only calculated for animals with 9+ locations in that season.

Frequency	*Yearly*	n	*Fall*	n	*Winter*	n	*Spring*	n	*Summer*	n
164.221	*54.54*	20	*nc*	nc	*nc*	nc	*nc*	nc	*nc*	nc
164.379	*27.70*	19	*nc*	nc	*nc*	nc	*nc*	nc	*nc*	nc
164.430	*94.58*	17	*nc*	nc	*nc*	nc	*nc*	nc	*nc*	nc
164.460	*145.00*	37	*86.78*	9	*35.75*	11	*47.78*	9	*6.70*	8
164.510	*117.60*	47	*21.25*	9	*17.31*	10	*57.37*	14	*22.39*	14
164.519	*148.70*	44	*24.63*	9	*74.46*	8	*30.93*	13	*17.27*	14

164.529	*97.21*	33	*52.93*	9	*28.88*	8	*18.57*	7	*44.70*	9
164.560	*88.81*	18	*nc*	nc	*nc*	nc	*nc*	nc	*nc*	nc
164.590	*326.50*	45	*186.9*	9	*99.19*	11	*58.05*	12	*116.00*	13
164.600	*205.70*	16	*86.15*	3	*79.96*	4	*25.76*	8	*nc*	1
164.610	*107.70*	30	*44.07*	8	*20.72*	6	*32.24*	7	*12.28*	9
164.880	*111.60*	16	*nc*	nc	*nc*	nc	*nc*	nc	*nc*	nc
165.799	*25.86*	14	*nc*	nc	*nc*	nc	*nc*	nc	*nc*	nc
n	*13*		*5*		*3*		*4*		*5*	
mean	*119.35*		*74.50*		*50.75*		*48.53*		*42.53*	
s.d.	*76.19*		*60.95*		*35.07*		*10.94*		*38.37*	

nc = not calculated

Seasonal analysis was not conducted on rams because of limited data. The restriction of using a minimum of 9 locations per season for calculating home range size eliminated most of the rams, including the 2 that died, the 2 missing individuals, and all rams captured during the final capture session.

The mean annual ewe home ranges of 70.18 km^2 for the northern ewe group, and 53.47 km^2 for the southern group, are both much larger than those reported in other desert bighorn studies. Leslie and Douglas (1979) reported a mean annual ewe home range of 16.9 $km^2 \pm 1.51$ km^2 in the River Mountains of Nevada, while Ebert and Douglas (1993) reported a mean annual ewe home range of 19.0 km^2 in the Eldorado Mountains of Nevada. McCarty and Bailey (1994) stated that habitat components for individual ewes usually occur within a 17-25 km^2 area, and that the maximum dispersion should be no more than 35 km^2. The mean annual ram home ranges of 53.7 km^2 are much closer to those reported elsewhere in the literature. Ebert and Douglas (1993) reported a mean annual ram home range of 49.7 km^2 in the Eldorado Mountains of Nevada, while

Cunningham and Hanna (1992) reported a mean annual ram home range of 70.7 $km^2 \pm 21.3$ km^2 (S.D.) in the Black Mountains of Arizona.

Seasonal Location Plots

Figure 6 shows a northern ewe's (164.029) home range plotted for both years, by season. This ewe has a very large annual home range, 117.10 km^2, and her seasonal locations are relatively distinct, compared to those of ewe 164.960 (Figure 7), with a smaller home range, 57.29 km^2, whose seasonal locations tend to overlap. In contrast, Figure 8 shows a southern ewe (164.410) whose seasonal, and combined yearly, home ranges are relatively compact and overlapping, and whose annual home range measures only 31.51 km^2. These figures illustrate that although not significantly different, southern ewe home ranges tend to be smaller, and less seasonally distinct than those of northern ewes.

PHYSICAL ATTRIBUTES

Land Surface Ruggedness Index (LSRI)

The close association between desert bighorn sheep and suitable escape terrain is well documented (McCarty and Bailey 1994). Bighorn sheep tend to prefer steep, rugged areas, where a possible threat can be assessed and an escape route taken, preferably uphill, if necessary. The orange and red areas in Figure 9 depict the steeper, more rugged areas in the Eagle Mountains. The LSRI map shows that preferred topography for the northern ewe sub-population is located in the extreme northern hills to the north and west of the mine complex, along with a few eastern ridges between the mine and Buzzard Spring (Figure 9). Preferred topography for the

Figure 6. Aerial telemetry relocations for ewe 164.029, depicted by season, in the Eagle Mountains, Riverside Co. CA, from August 20, 1993 - August 14, 1995.

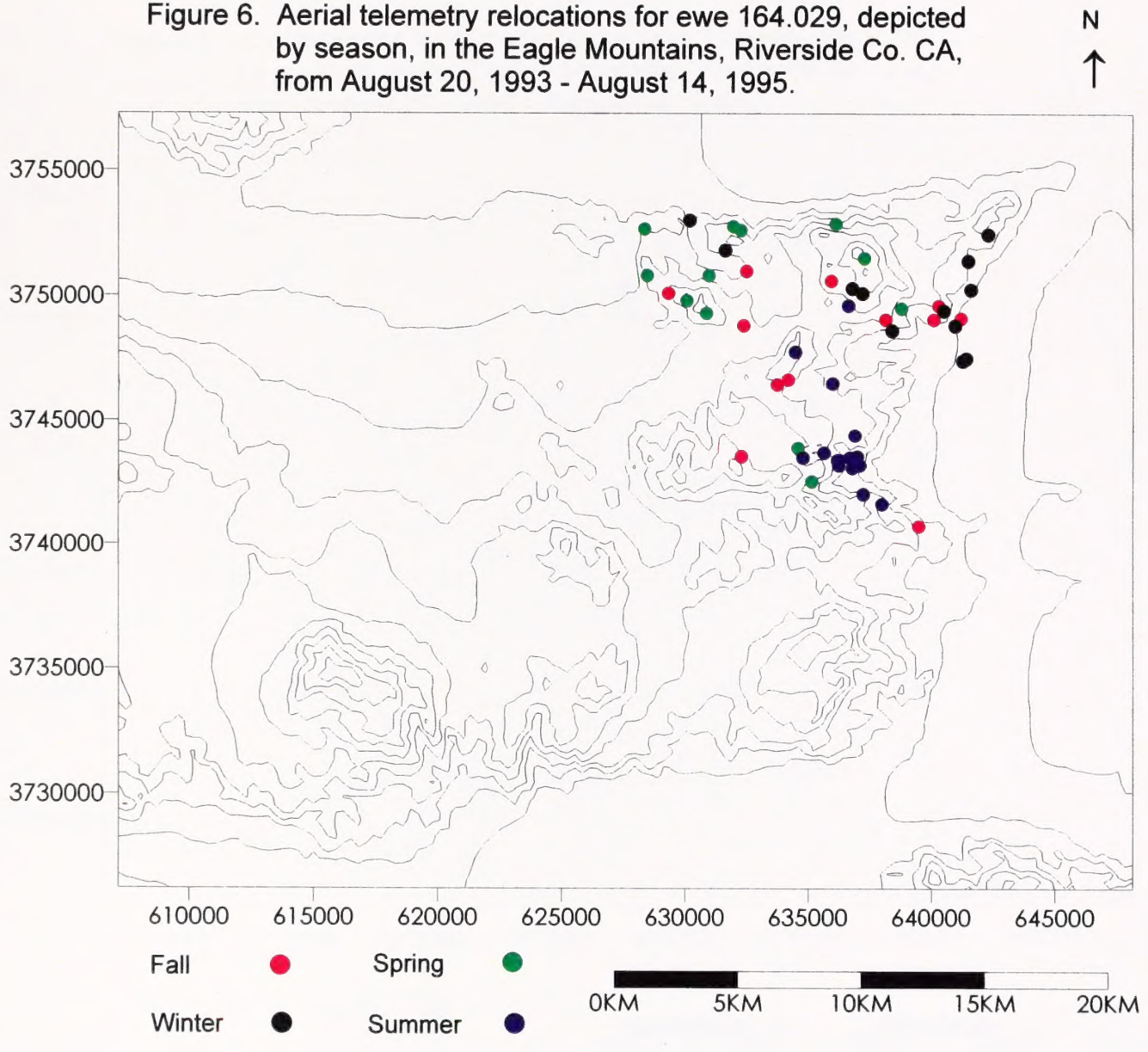


Figure 7. Aerial telemetry relocations for ewe 164.960, depicted by season, in the Eagle Mountains, Riverside Co., CA, from August 20, 1993 - August 14, 1995.

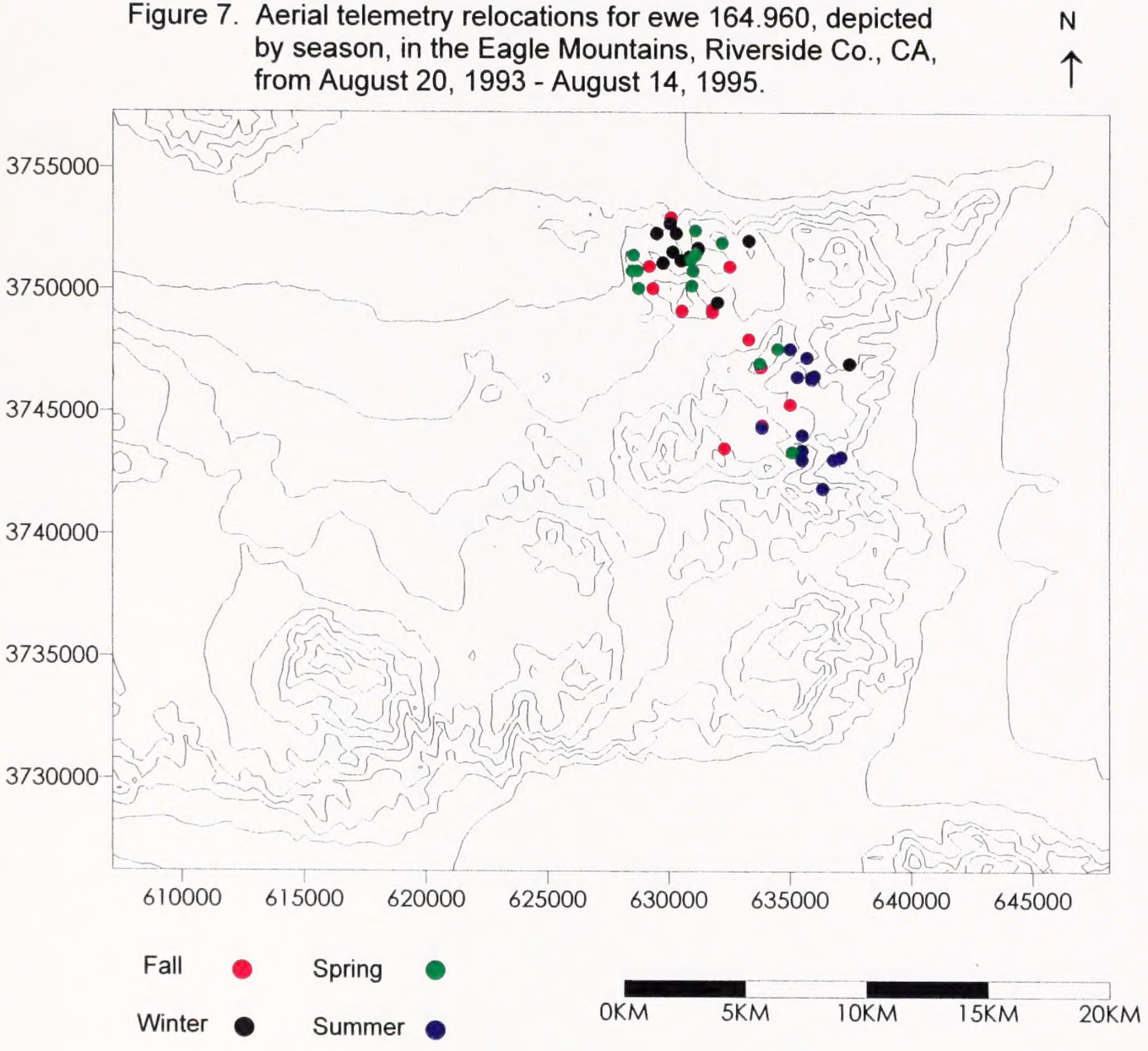


Figure 8. Aerial telemetry relocation data for ewe 164.410, depicted by season, in the Eagle Mountains, Riverside Co., CA, from August 20, 1993 - August 14, 1995.

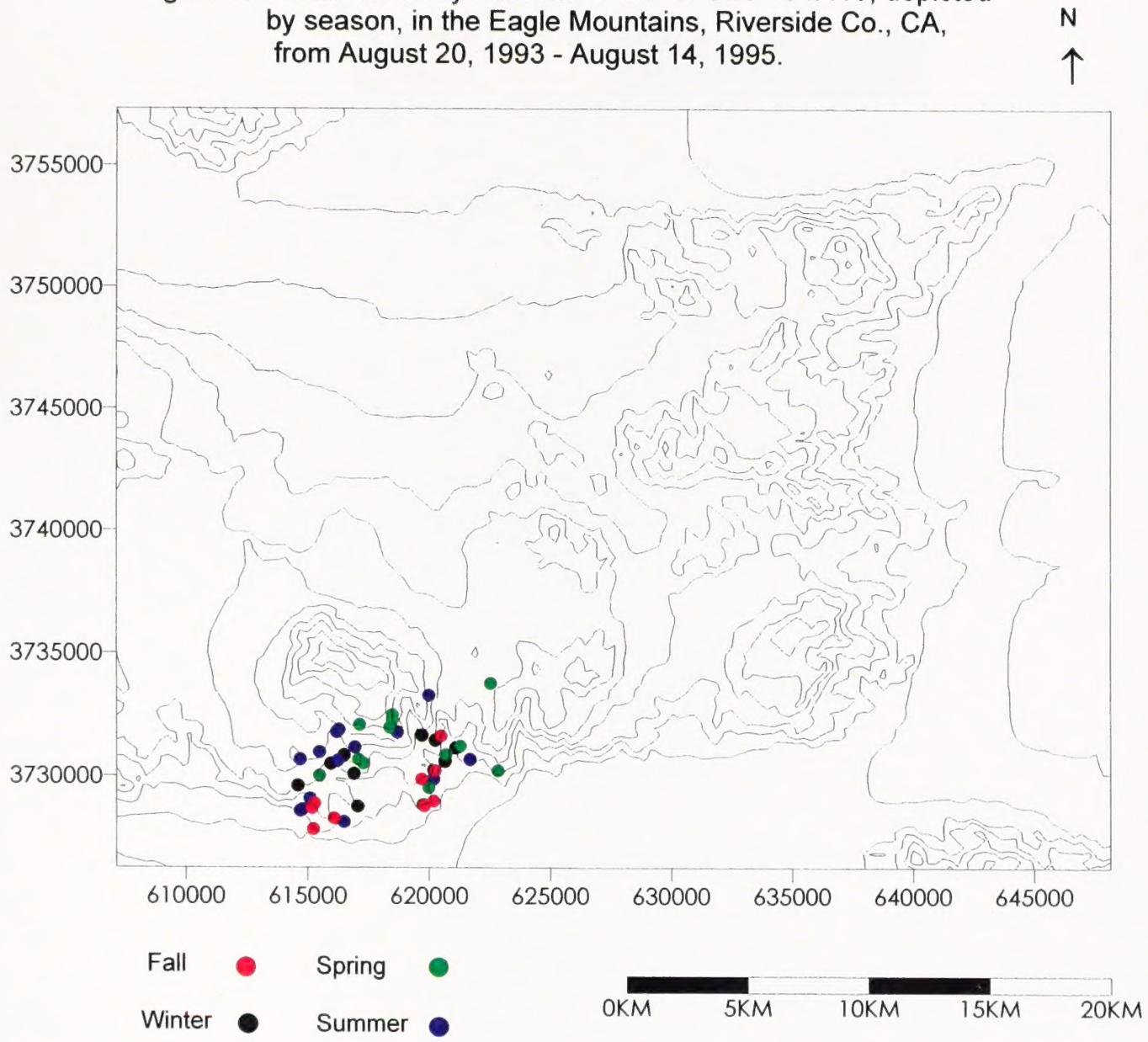
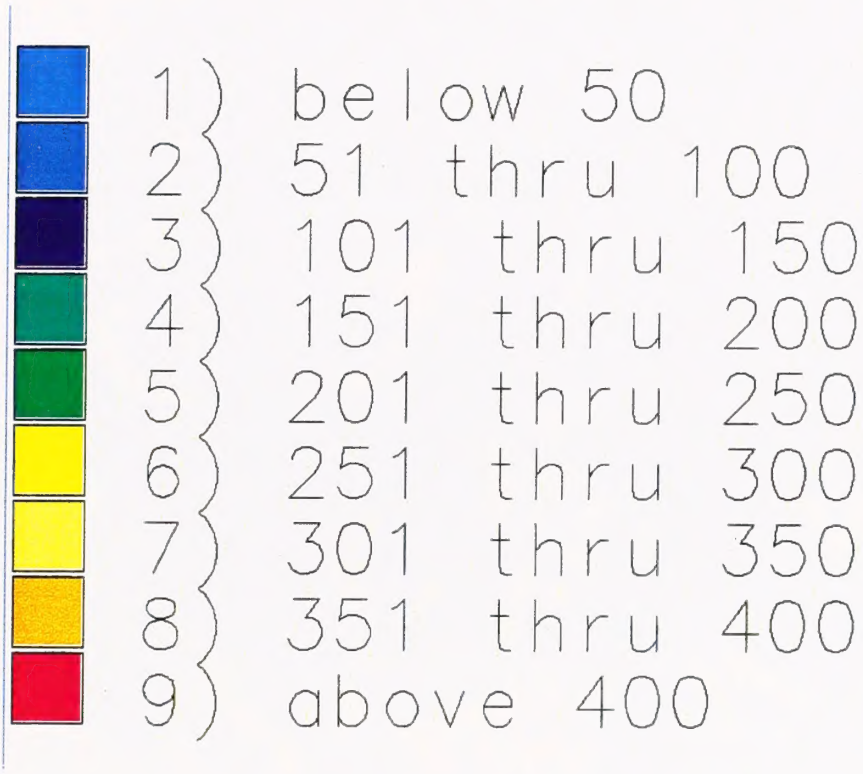
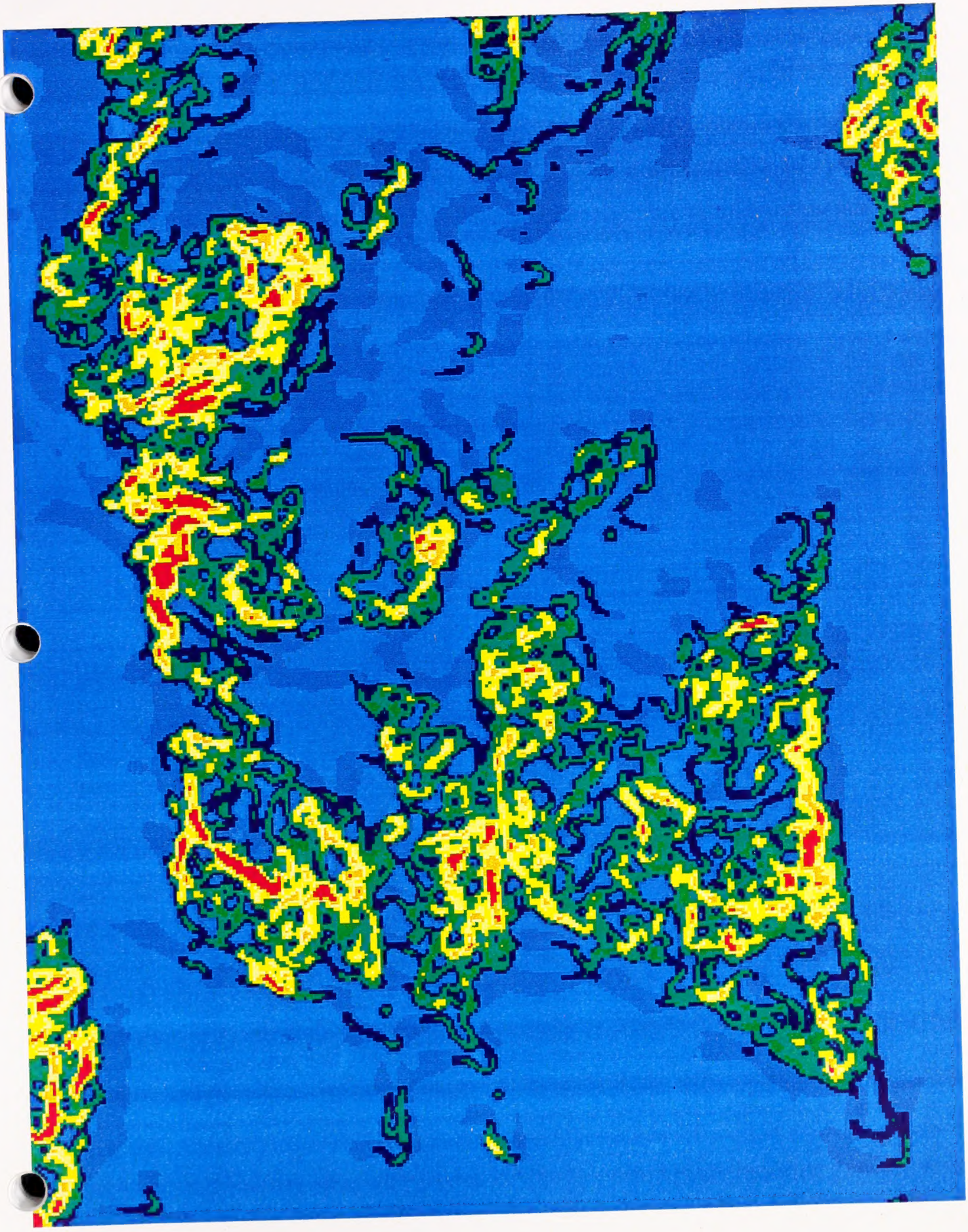


Figure 9. Land Surface Ruggedness Index (LSRI) map for the Eagle Mountains and surrounding vicinity.





southern ewe group is located in the hills surrounding Summit Spring and Lost Palms Oasis (Figure 9). These rugged areas correspond well with recorded ewe locations. Northern ewes tend to congregate in the northern hills during the fall, spring and winter, and migrate south towards Buzzard Spring in summer, although the southern movement is probably due to a lack of water rather than a preference for topography. Southern ewes congregate in hills surrounding Summit Spring during all seasons of the year. Rams tend to travel farther than ewes (McCarty and Bailey 1994), thus use a wider variety of topography. But in general, rams prefer gentler, flatter regions such as those in the western end of Big Wash and Buzzard Spring areas (Figure 9).

Distance From Permanent Water

Spring Survey

During the spring survey in May 1994, 10 of the 16 known springs were examined and evaluated (Table 6). The remaining 6 springs, all on the USGS Cottonwood Spring 1:62:500 Quadrangle Map (Table 6), were all deemed too close to the JTNP Cottonwood Campground to

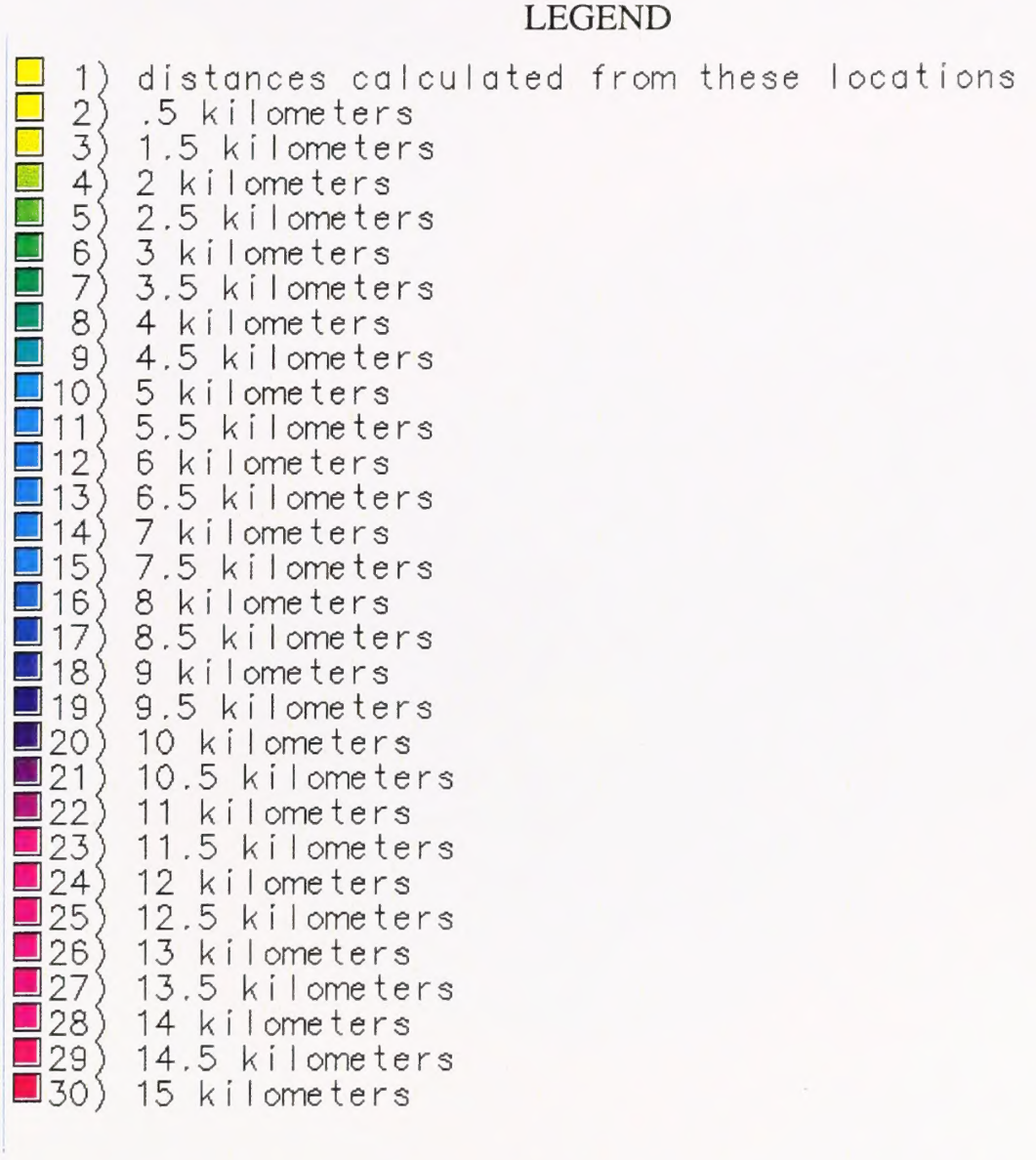
Table 6. Listing of all known water sources in and around the Eagle Mountain Mine, Riverside County, California.

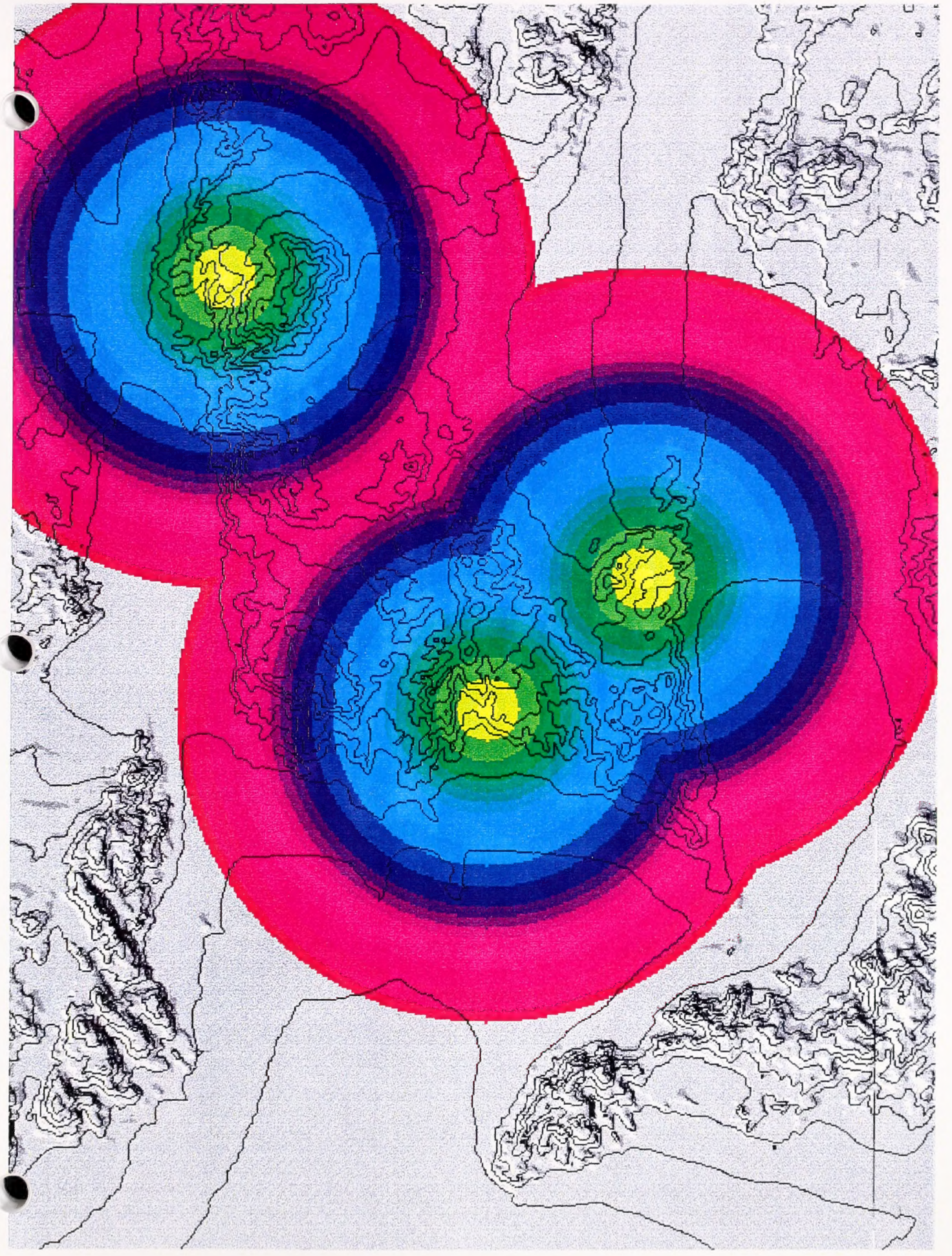
1:62,500 Quad Map	Water Source Name	North-South UTM Coord.	East-West UTM Coord.
Pinto Basin	Eagle Tank Spring	37-50-750 N	6-30-500 E
Pinto Basin	Eagle Tank	30-50-900 N	6-30-750 E
Pinto Basin	Buzzard Spring	37-43-700 N	6-36-050 E
Pinto Basin	Conejo Well	37-36-200 N	6-17-350 E
Pinto Basin	Conejo Spring	37-36-100 N	6-17-250 E

Hayfield	Hayfield Spring	37-32-800 N	6-29-950 E
Hayfield	Hayfield Summit Sp.	37-31-600 N	6-33-950 E
Hayfield	Lost Palms Oasis	37-31-900 N	6-16-150 E
Hayfield	Summit Spring	37-30-650 N	6-16-250 E
Hayfield	Spring	37-30-000 N	6-16-000 E
Cottonwood Sp.	Spring	37-30-450 N	6-14-950 E
Cottonwood Sp.	Spring	37-30-650 N	6-14-850 E
Cottonwood Sp.	Spring	37-31-100 N	6-14-750 E
Cottonwood Sp.	Cotton Spring	37-34-100 N	6-10-300 E
Cottonwood Sp.	Cottonwood Spring	37-33-400 N	6-10-300 E
Cottonwood Sp.	Wood Spring	37-33-000 N	6-10-200 E

be used by sheep from the Lost Palms area. Subsequent telemetry data support this assessment. Of the 10 springs examined, only 4 contained available surface water, Buzzard Spring and Eagle Spring in the north, and Summit Spring and Lost Palms Oasis in the south (Figure 10). Buzzard Spring is a permanent, flowing spring complex that flows for tens of meters down the canyon, and acts as the major northern water source for the Eagle Mountain bighorn sheep herd. During subsequent telemetry flights, it was discovered that the location for Buzzard Spring recorded on USGS maps is not the complex of pools that is commonly thought of as Buzzard Spring. There is an ephemeral pool of water at the USGS map location, but the main series of permanent pools is actually several hundred meters down the canyon at the bottleneck where the canyon floor falls rapidly in elevation towards the valley floor. Eagle Spring/Tank is a natural spring or seep that accumulates water in rock formations near the southern end of Placer Canyon. This spring appears to get relatively heavy use in the spring months, but appears to dry up during hot summer

Figure 10. Distance from permanent water map, Eagle Mountains, Riverside Co., CA.





months. Summit Spring and Lost Palms Oasis are two springs in the southern region of the Eagle Mountains, and during wet times, it is hard to determine where one ends and the other begins. During the survey flight, water was so abundant in the Lost Palms area, that a pinpointing of each water source was abandoned, and the entire region was labelled as a water source. It is believed that water is available in this area during all seasons of the year.

Distances

Desert bighorn have a close association with water sources, especially during hot, dry summer months. Leslie and Douglas (1979) found 49% of desert bighorn within 1600 m (1.6 km) of water in the River Mountains, NV between June and August, and 84% within 3200 m (3.2 km). Hansen (1982) found 70% of desert bighorn within 800 m (.8 km) of water in the Sheldon National Wildlife Refuge, NV, and 90% within 1000 m (1 km). In the Eagles, summer sheep locations for both sub-populations tended to be closer to permanent water sources than in any other season (Table 7 , Appendix A). Spring sheep locations were closer to water, on average, than fall or winter locations, but were still more distant from permanent water, on average, than summer sheep locations. It is theorized that an increased demand for water during lactations might be the prime factor causing the close proximity to water during spring months. In the northern sub-population, 71% of all summer locations, 51% of all spring locations, 38% of all fall locations, and 32% of all winter locations were within 3 km of a permanent water source (Appendix A). In the southern sub-population, 49% of all summer locations, 56% of all spring locations, 45% of all fall locations, and 41% of all winter lcoations were within 3 km of a permanent water source (Appendix A).

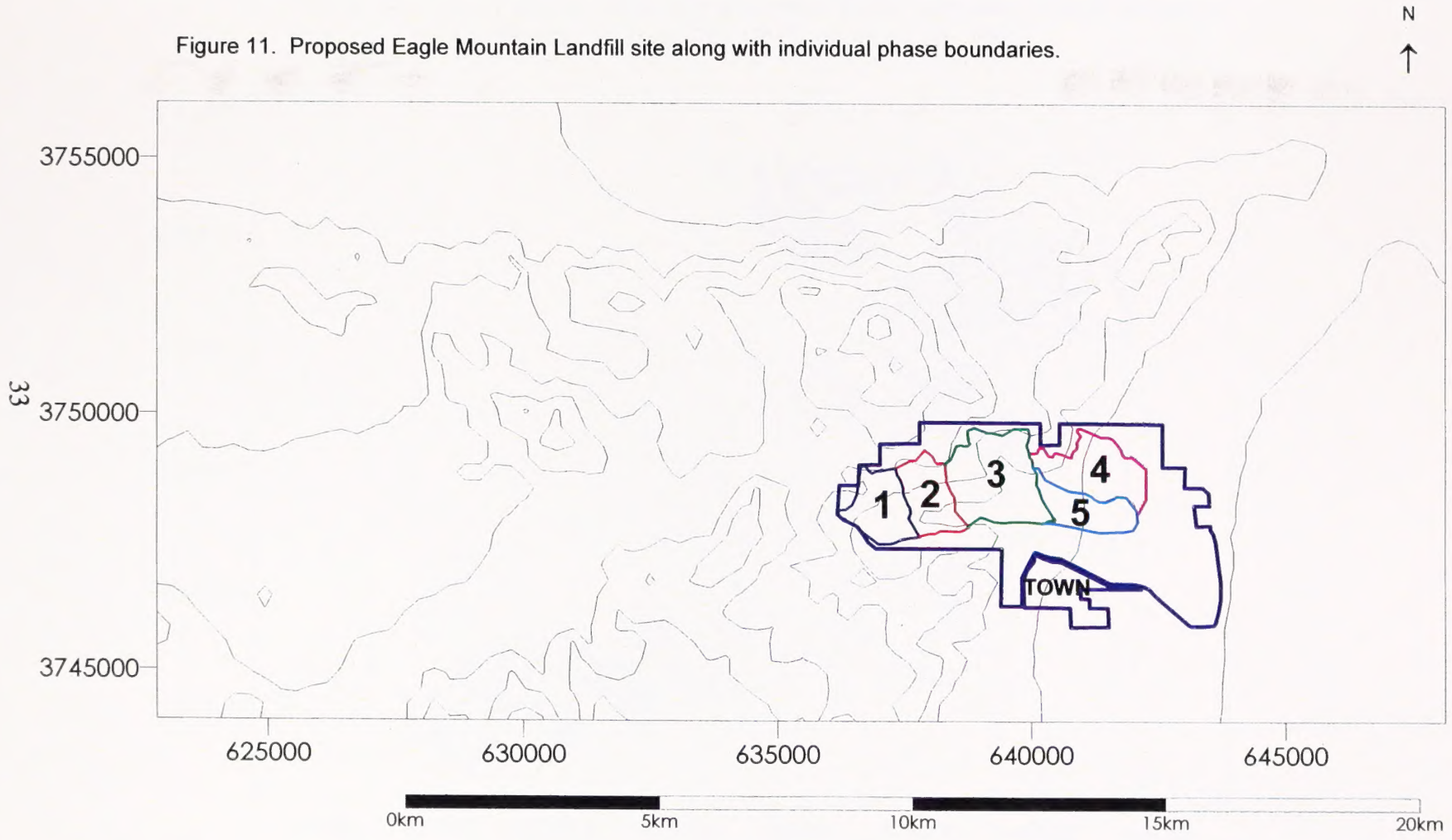
Table 7. Average distance from permanent water, broken down by season and by sub-population, in the Eagle Mountains, Riverside County, CA, August 20, 1993 - August 14, 1995.

	Northern Sub-Population	Number of Locations	Southern Sub-Population	Number of Locations
Summer	3.57 km	289	3.05 km	95
Fall	4.18 km	212	4.91 km	68
Winter	4.20 km	238	4.76 km	72
Spring	3.90 km	281	4.29 km	87

Sheep Movements Relative to The Proposed Landfill

As currently planned, the proposed landfill will be constructed and operated in 5 different phases (Figure 11). Yearly sheep locations are shown in juxtaposition to the landfill site plan in Figure 12, and seasonal locations are shown in Figures 13-16. It is evident from figures 12-16 that ewes tend to use areas closer to the mine than rams do. The largest concentrations of ewe locations are northwest and southwest of the landfill site, but several locations fall within the designated phase boundaries, during all 4 seasons. Phases 1-3 are located in the hills between the main haul road and the radio tower, while phases 4 and 5 are located in the east-pit region. Since ewes use the hills more than the pit areas, most locations were within the boundaries of phases 1-3. Sheep were seen crossing the main haul road southeast of the radio tower on multiple occasions, and appear to use the ridges leading from the extreme northern ridges to the haul road as crossing zones from the northern region to the central region. Sheep also use the northwestern section of the mine, as well as the area west of Placer Canyon to cross into the

Figure 11. Proposed Eagle Mountain Landfill site along with individual phase boundaries.



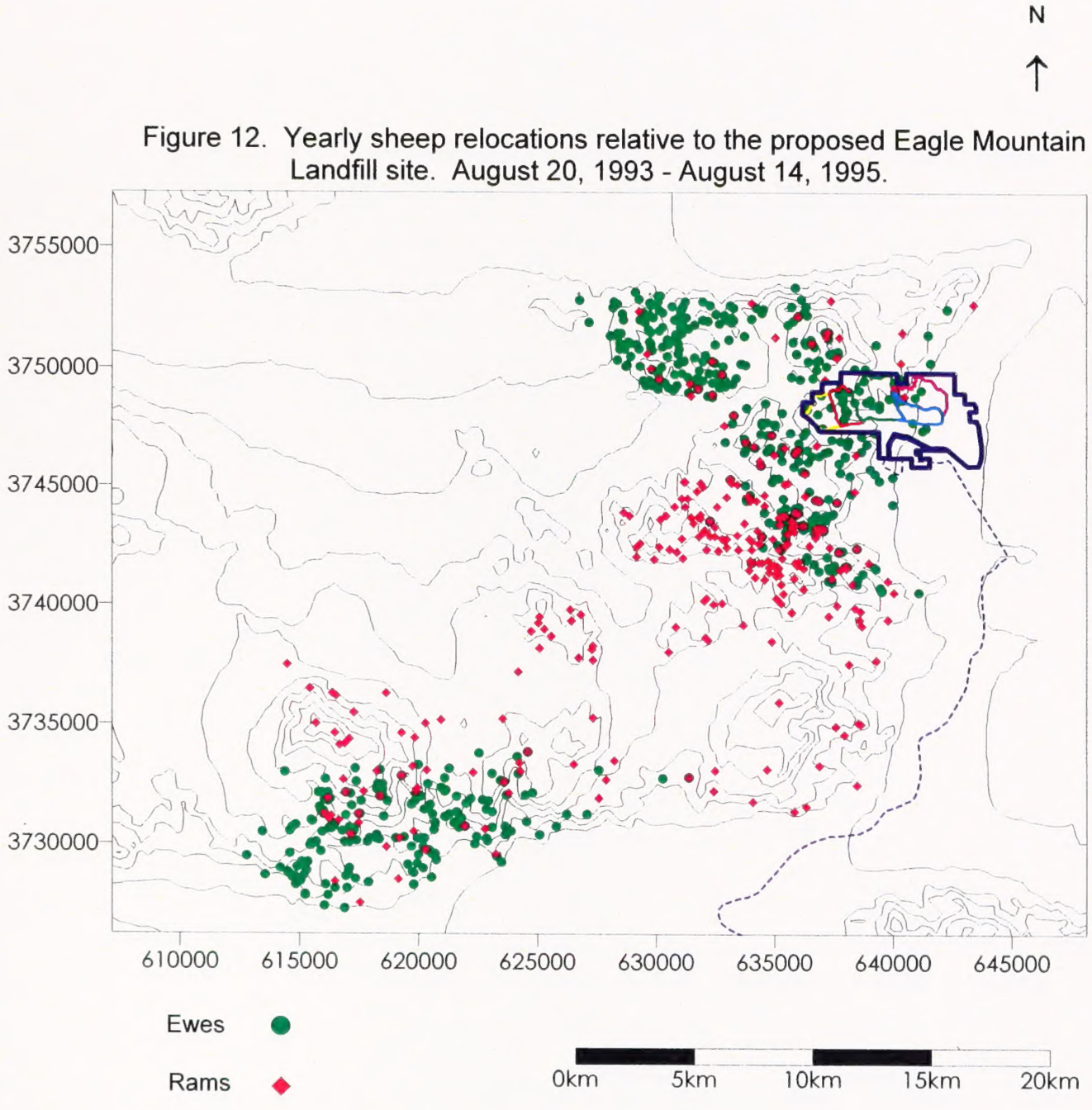


Figure 12. Yearly sheep relocations relative to the proposed Eagle Mountain Landfill site. August 20, 1993 - August 14, 1995.

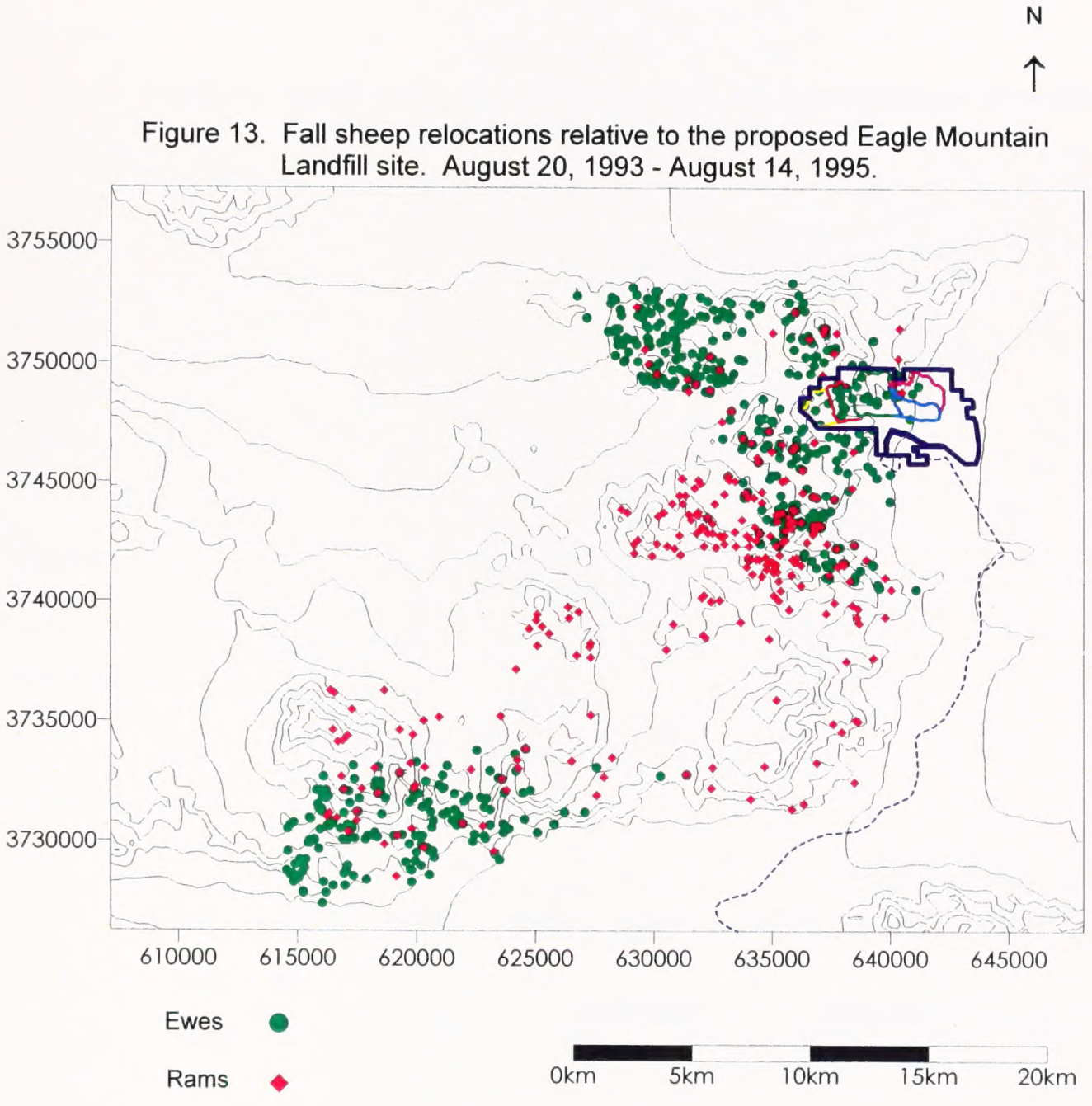


Figure 13. Fall sheep relocations relative to the proposed Eagle Mountain Landfill site. August 20, 1993 - August 14, 1995.

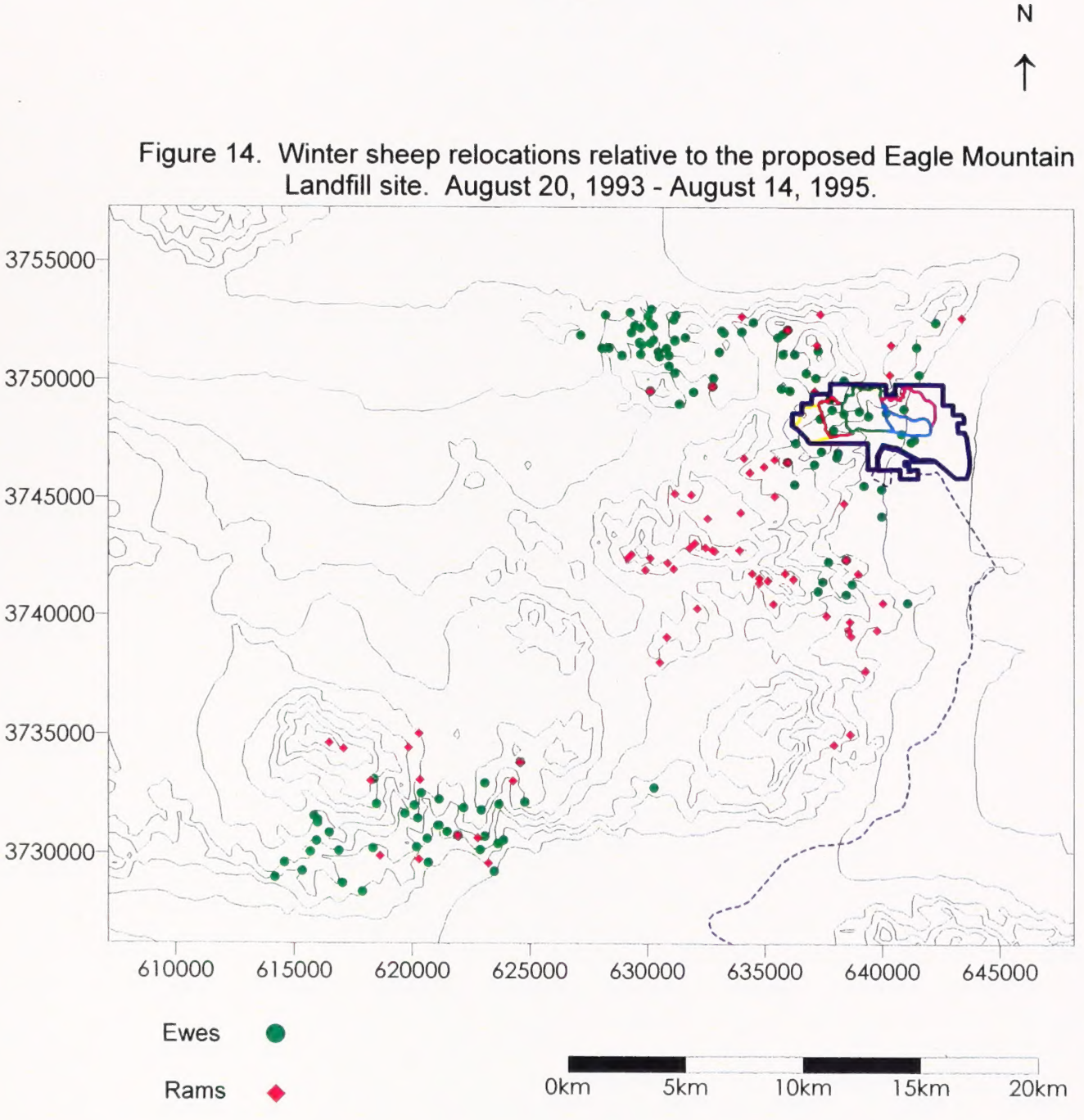


Figure 14. Winter sheep relocations relative to the proposed Eagle Mountain Landfill site. August 20, 1993 - August 14, 1995.

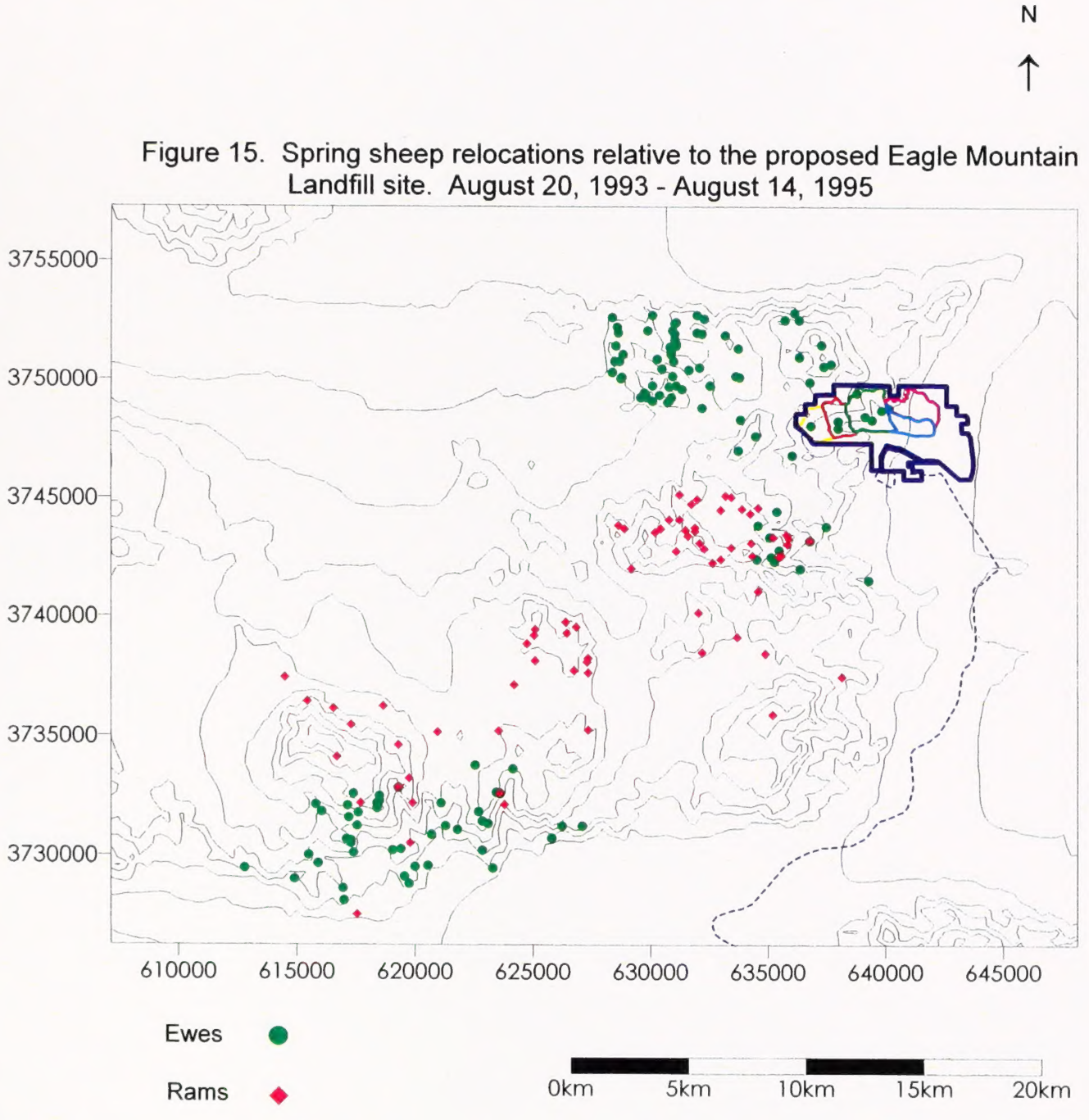


Figure 15. Spring sheep relocations relative to the proposed Eagle Mountain Landfill site. August 20, 1993 - August 14, 1995

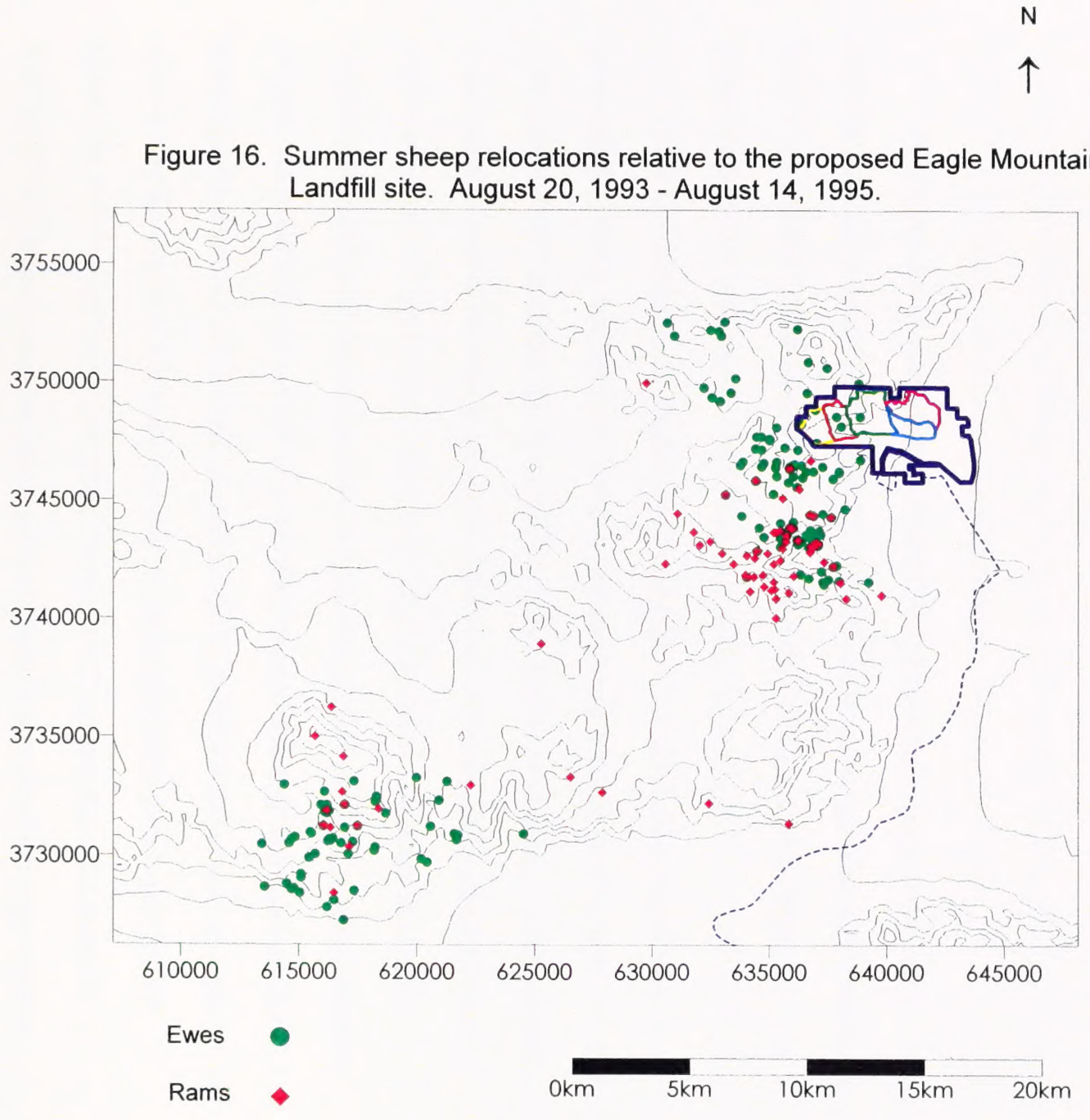


Figure 16. Summer sheep relocations relative to the proposed Eagle Mountain Landfill site. August 20, 1993 - August 14, 1995.

central sections and into Buzzard Spring. It is hypothesized, though not conclusively proven, that the peninsula extending eastward from the Eagle Mountains towards the Coxcomb Mountains is used as a travel corridor between the two ranges. The landfill site lies on the southern edge of the peninsula, but does not sever it.

GENETICS

The Major Histocompatibility Complex (MHC) is the genomic portion controlling vertebrate immune responses, and is typically one of the most variable portions of the genome. In order to identify MHC variation among different populations of bighorn sheep, allelic polymorphisms were examined at 5 MHC loci for all sheep captured.

All sheep sampled in the Eagles were found to have 2 or more alleles at each locus (polymorphic). Sheep sampled in the Old Dad mountain range to the north also tested polymorphic at all 5 loci, while sheep sampled in the San Bernadino Mountains to the west were monomorphic, or fixed, for a single allele at 2 of the 5 loci. All of the alleles present in other populations of desert bighorn were present in the Eagle population. The Eagle Mountain population also possessed one unique allele that was not present in any other bighorn populations sampled. Allendorf and Leary (1986) conclude that although advantages and disadvantages of heterozygosity have been documented, in general heterozygosity and fitness have a positive relationship. But they also state that measuring heterozygosity at one point in time can not measure the full effects of genetic variation. The theory of frequency dependent selection suggests that rare alleles may be maintained in a population because they infer some selective advantage, even if the heterozygous genotype has lower fitness than the homozygous genotype.

Such selective advantage may play an important role in extinction avoidance.

DISCUSSION AND RECOMMENDATIONS

The assessment by RECON (Lawhead et al 1991) that three permanent water sources and one temporary water source will be lost with construction and operation of the Eagle Mountain Landfill, is unsubstantiated. There is no indication that any permanent water source will be affected by landfill construction, although numerous temporary sources will be lost. These temporary sources consist of shallow depressions in the hard-packed mine roadways and excavation pits that fill with water during rainfall. Although some of these depressions can remain filled with water for extended periods of time, none constitute a permanent water source. However, although only temporary water sources will be eliminated, the necessity of water source enhancement, or addition, is still present. In order to offset water eliminated due to landfill operations, and to assist in leading bighorn away from landfill or other heavy-use areas, the addition of another water source, and/or the enhancement of existing water sources is recommended.

Figures 13-16 show that bighorn were found within the proposed landfill boundary during all four seasons. The hills to the immediate north and west of the proposed landfill site are used extensively by ewes in the fall, winter and spring months, but are used only lightly in the summer months. Although most activity, including lambing, occurs in the western end of the mine complex, outside of landfill boundaries, alterations of ewe movements and home ranges should be expected. It is impossible to exactingly predict the degree of such movements, but it is likely that ewes will shift their activities more towards the northwest end of the mine complex.

Sheep literature is rich with references concerning impacts of man on bighorn sheep populations. Impacts range from the negative, to the seemingly indifferent. Holl and Bleich (1983) stated that sheep usually fled from humans when approached within 100 m, while Stranger et. al (1986) found that in Utah, desert bighorn behavior was not altered when exposed to riverboat traffic in the summer months. Possibly the most informative insights come from Graham's (1990) chapter on modern man's impact on desert bighorn sheep. In his chapter, Graham notes that Emmett Ball, a Forest Service mining engineer, reported bighorn sheep watering at the Eagle Mountain Mine within 60 m of an office building. Graham (1980) also noted that people at the mine reported seeing bighorn along mining roads that were being used constantly by large, industrial mining trucks. The theme of such reports is that bighorn can tolerate some degree of disturbance, and may become somewhat habituated to the disturbance. Such habituation is more likely if there is a certain degree of distance, especially vertical distance, between the sheep and the disturbance, and if the disturbance is an on-going activity not directed at the sheep. But, such reports do not infer that bighorn sheep will inevitably become accustomed to disturbance, or that the disturbance will have a null effect. Graham (1980) also noted that permanent human disturbance very near lambing habitat will almost definitely cause a shift in bighorn movements away from the disturbance. Leslie and Douglas (1979) found that due to water dependence, the relative location of construction activities caused a "significant shift in use of artificial water sources." Accordingly, a shift in ewe movements in the Eagle Mountains may necessitate the placement of artificial water sources to offset the water sources lost because of landfill operations.

It is the opinion of the investigators that one (1) or (2) water sources should be

constructed to facilitate sheep movements away from landfill operations. Because of the presence of an existing artificial water unit near the mine headquarters, and a desire to lead sheep away from heavy disturbance, both of the additional sources should be located west of the landfill, somewhere between the central mine pit, and Placer Canyon. It is recommended that Eagle Spring be evaluated to determine the feasibility of enhancing it into a permanent, year-around source. Depending on the feasibility of modifying Eagle Spring and the success of these efforts, an additional artificial water source may need to be installed. Possible installation sites are at the base of the northern hills east of Placer Canyon, or at the base of the southern hills between the Black Eagle Mine and Placer Canyon, possibly located south of Kaiser's west gate, near the Black Eagle Road. A water unit specialist will need to be consulted to determine the most efficient type and size of unit to be installed. Regardless of actions taken to enhance water sources near the mine, the cleaning and maintenance of Buzzard Spring is imperative to the survival of the northern ewe subpopulation. Buzzard Spring is the primary water source in the northern Eagle Mountains, and its loss would have devastating effects on the northern sub-population.

It must be stressed that recommendations contained in this report are of a preliminary nature, and may be slightly altered depending on results of the next phase of monitoring. Also, because of severe budget reductions in the second year of the study, vegetational analysis could not be accomplished, thus the habitat analysis is preliminary. Further analysis of habitat features and ewe movements in the Eagle Mountains will be addressed in the Dissertation project currently underway by the authors.

The research proposal for Phase II calls for experimental placement of temporary water sources in areas determined to have the highest probability of acceptance by bighorn, and the

monitoring of their use by sheep prior to selecting permanent installation sites. Final placement will not be possible until after the landfill is in full operation, because only then will the full extent of alterations to sheep movements be known. Although we believe that landfill operations will not sever the movement corridor between the Eagle Mountains and the Coxcomb Mountains, or between the northern hills of the Eagle Mountains and Buzzard Spring, both movement corridors will need to be monitored during landfill construction and initial operation. Additionally, we think that landfill operations will not negatively affect lambing of the northern ewe group, but close monitoring during the early spring months will need to be initiated, to ensure that human-lamb conflicts are minimized. Finally, it is our opinion that any effect from human activities at the proposed Eagle Mountain Landfill will be limited to the northern sub-population of ewes, and that there should be no direct detrimental effects from the proposed landfill on the southern ewe sub-population.

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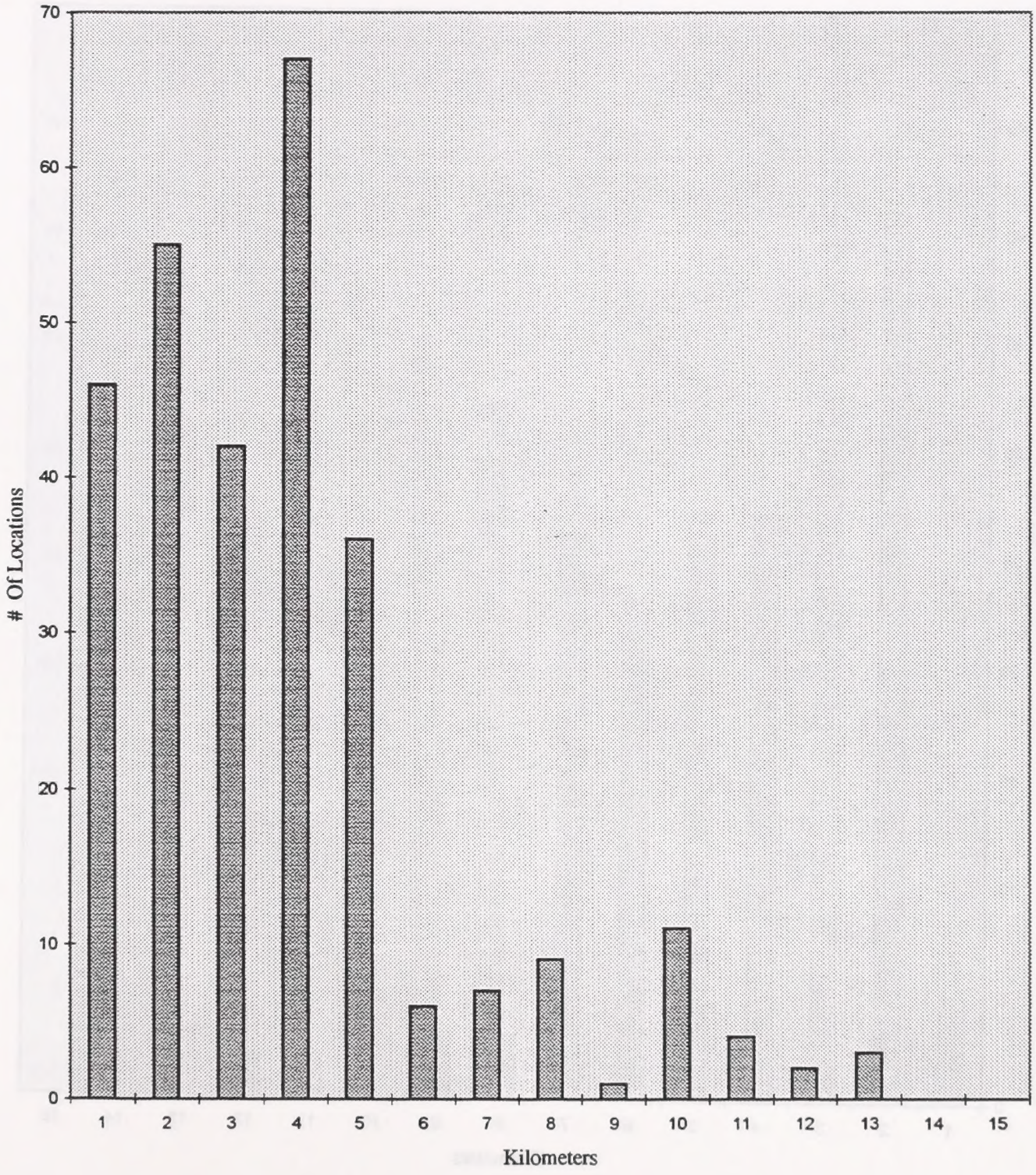
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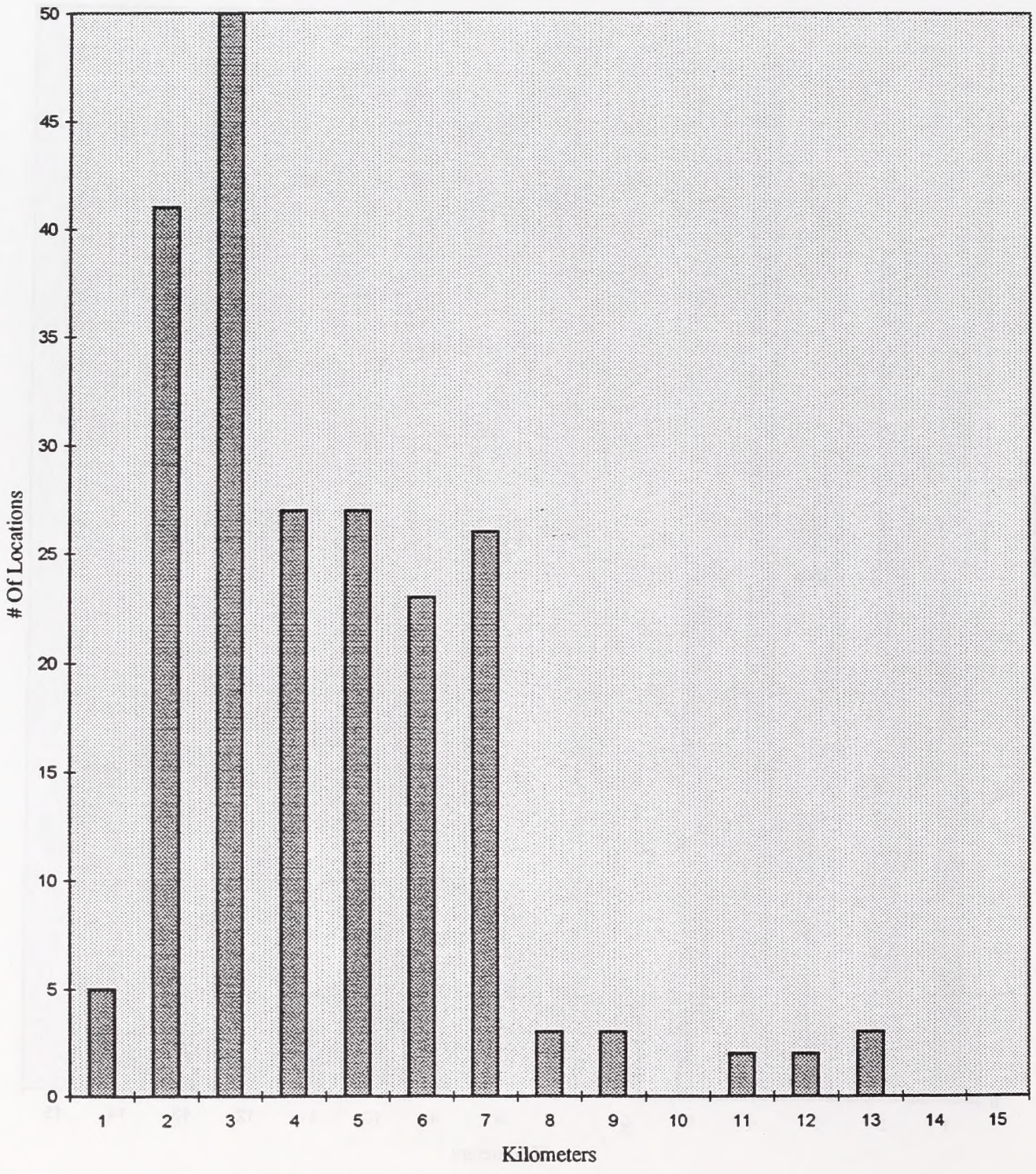
Appendix A. Seasonal distances from water, separated by sub-population.



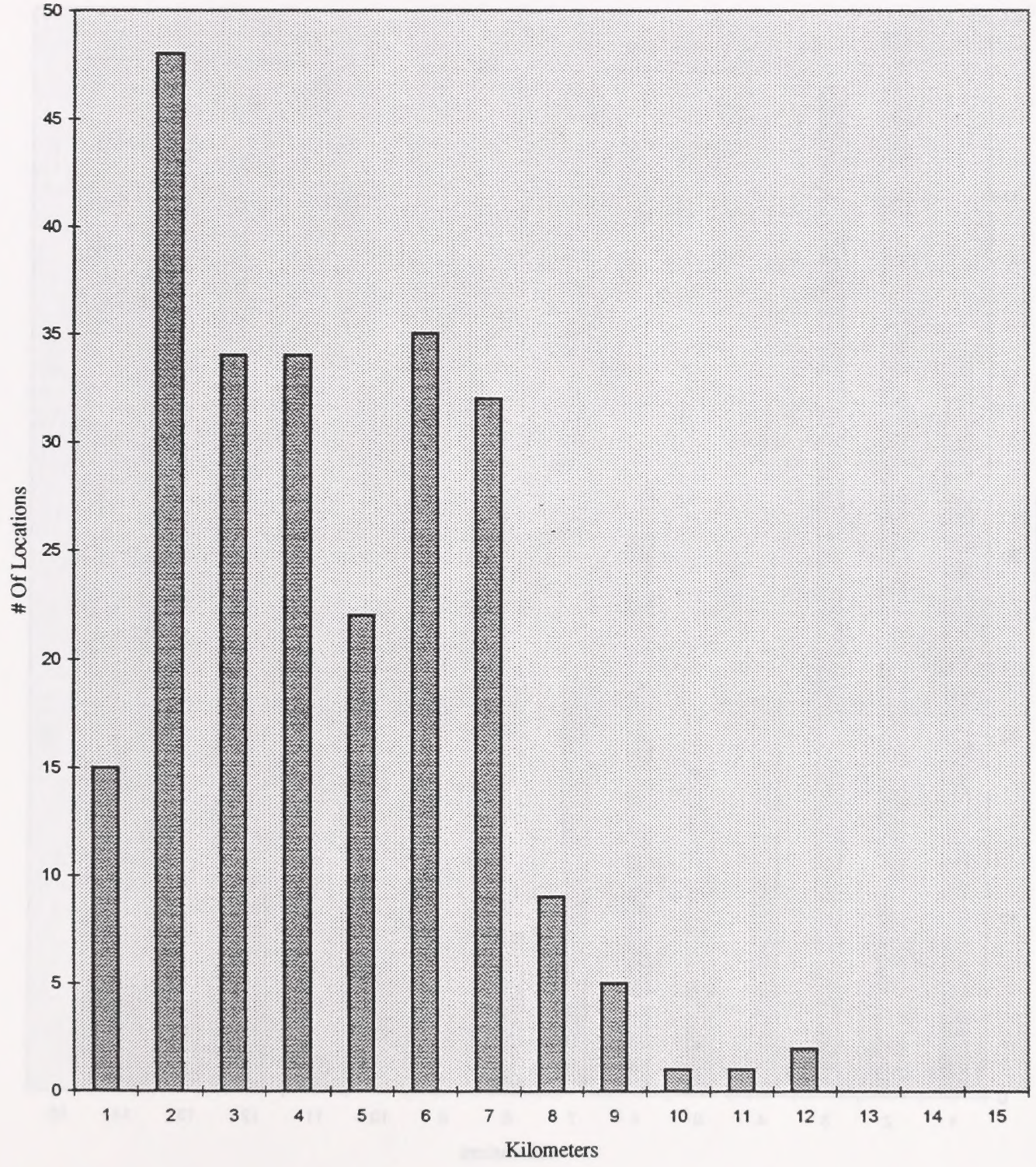
Summer Distances From Water
Northern Sub-Population



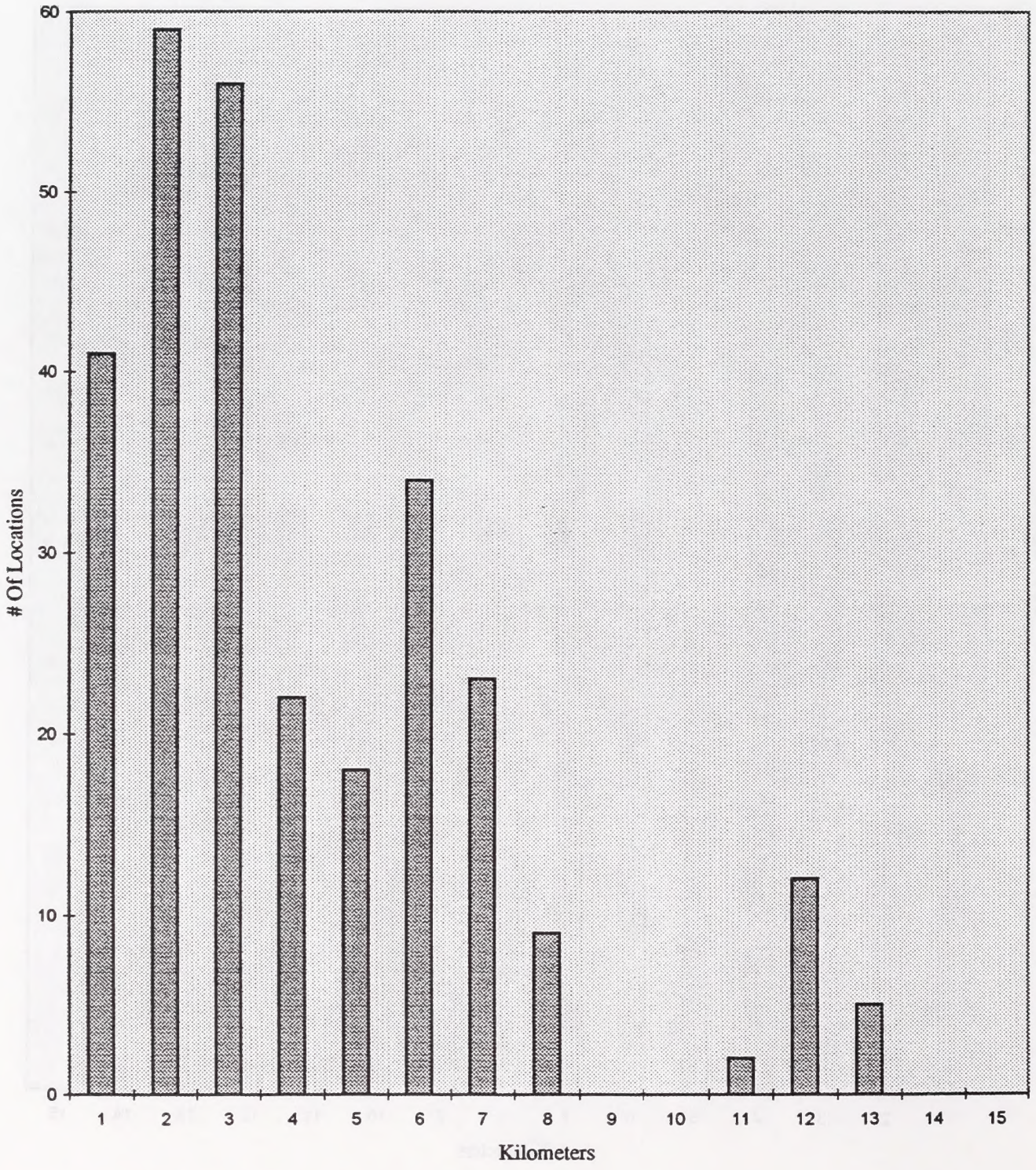
Fall Distances From Water
Northern Sub-Population



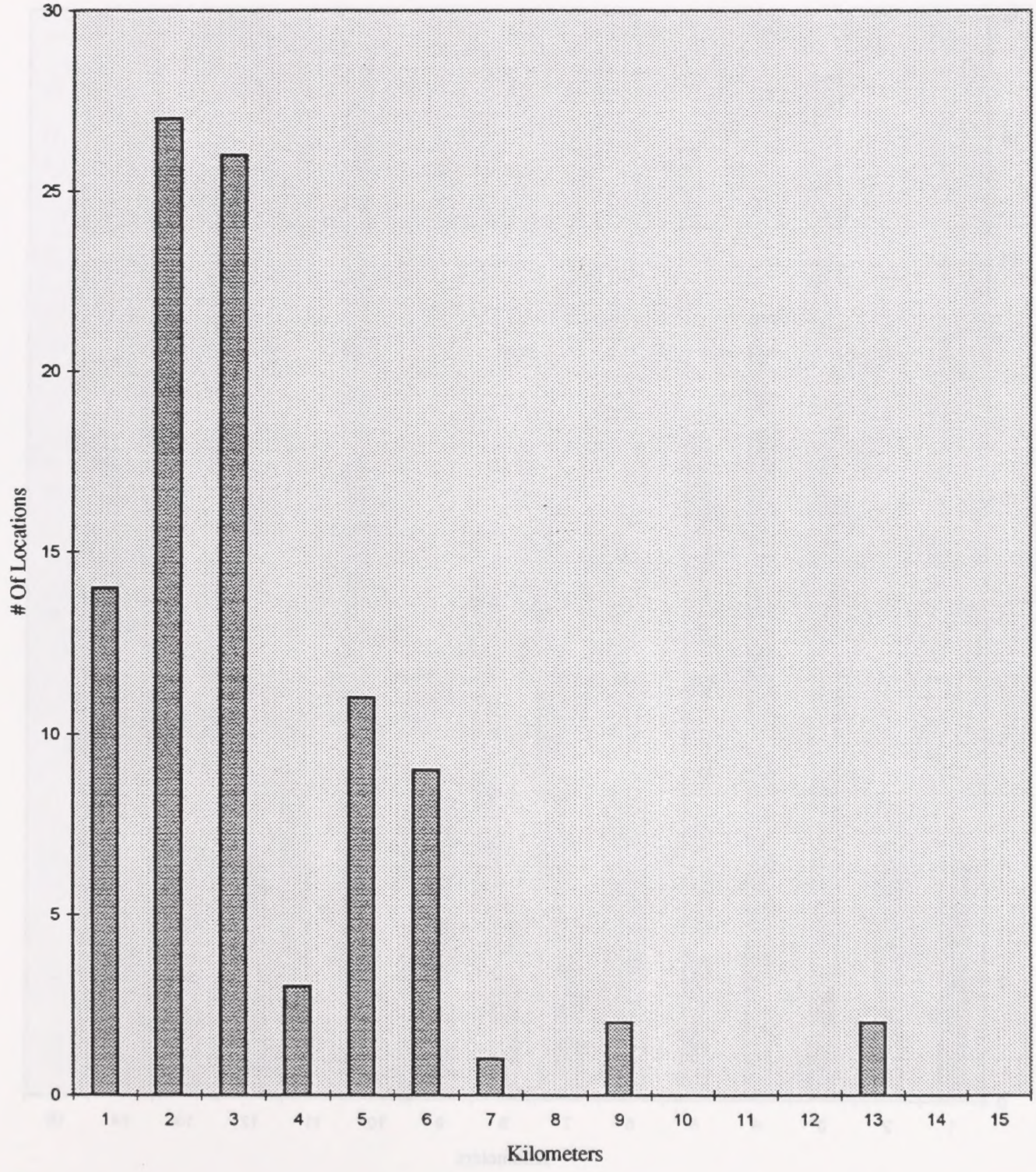
Winter Distances From Water
Northern Sub-Population



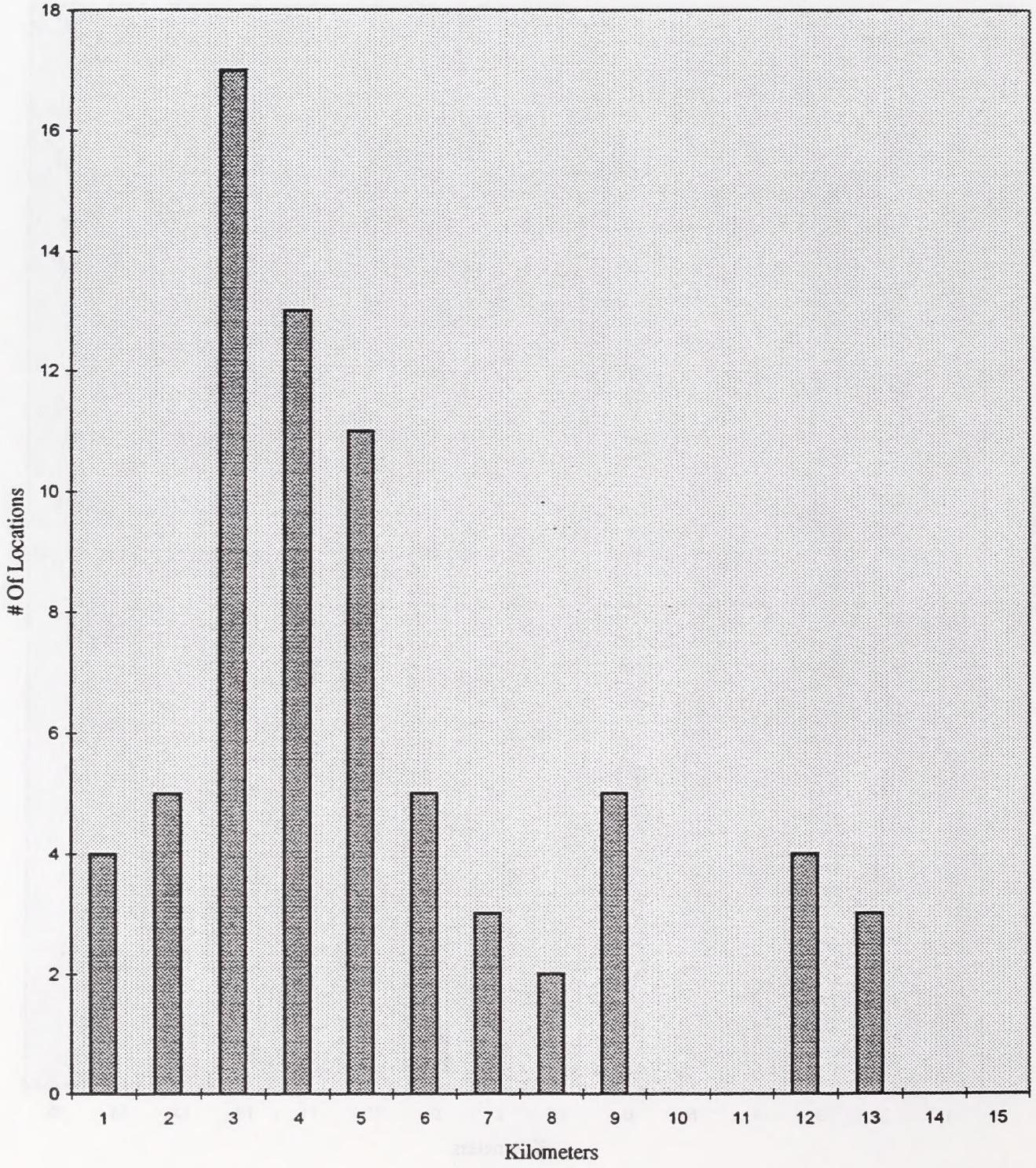
Spring Distances From Water
Northern Sub-Population



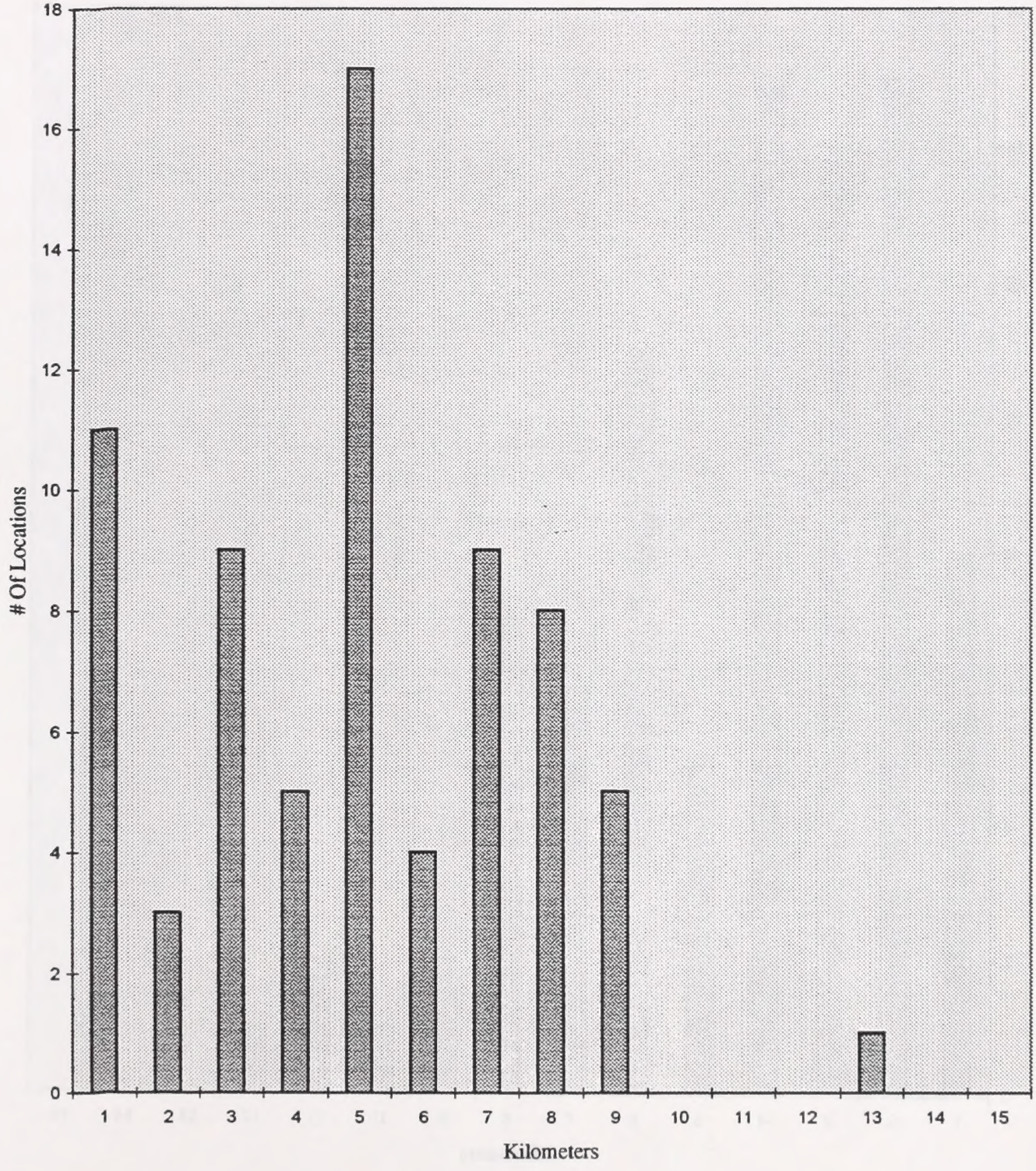
Summer Distances From Water
Southern Sub-Population



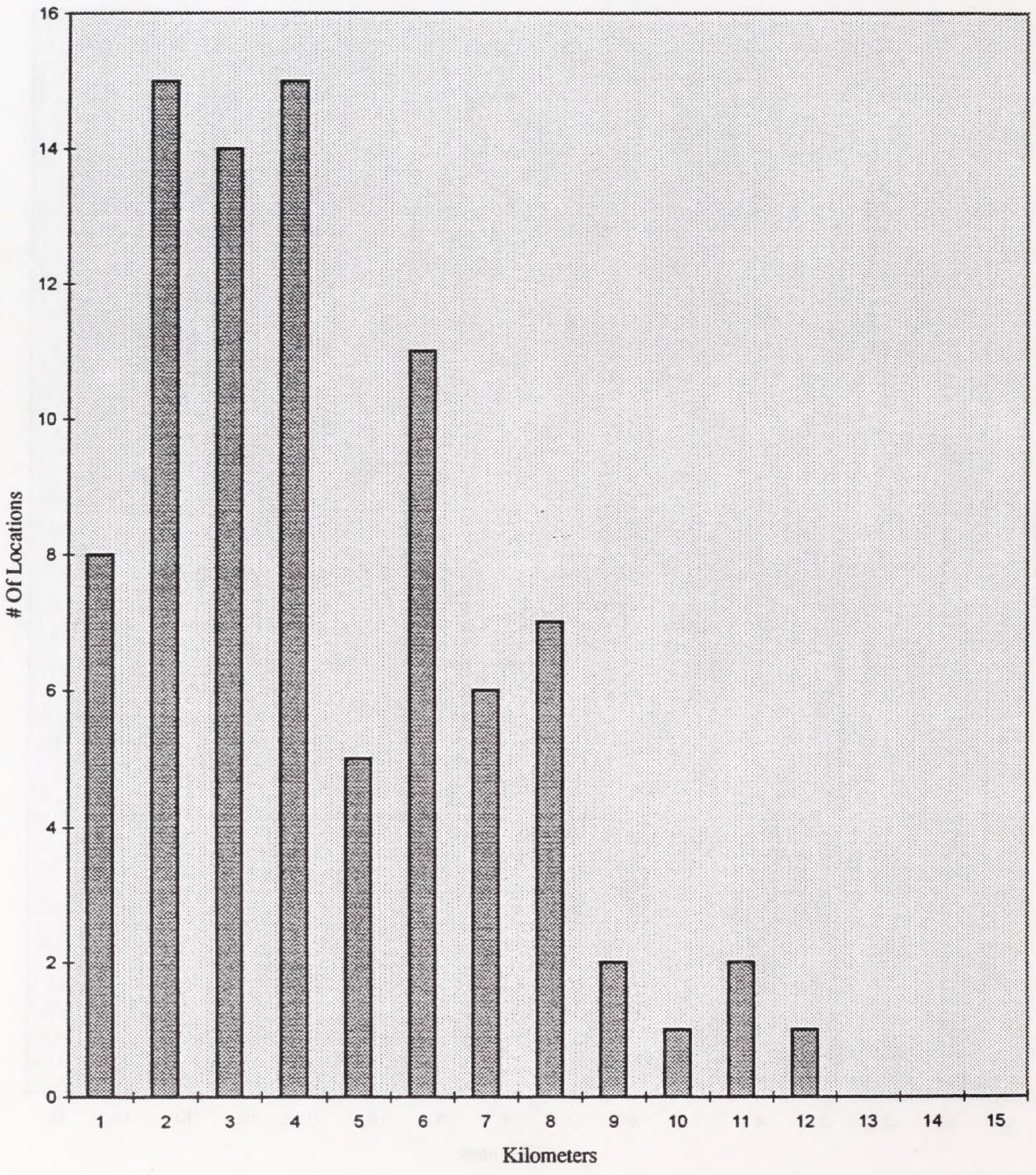
Fall Distances From Water
Southern Sub-Population



Winter Distances From Water
Southern Sub-Population



Spring Distances From Water
Southern Sub-Population



Appendix O
Notice of Availability/Notice of Completion and Other Agency Correspondence

Recipients of the Eagle Mountain Landfill and Recycling Center Final Environmental Impact Study/Environmental Impact Report

AGENCIES

Air Resources Board
Angeles National Forest
Biological Resources Division, U.S. Geological Survey
Bureau of Land Management, California Desert District
Bureau of Land Management, California State Office
Bureau of Reclamation, Lower Colorado Regional Office
Cahuilla Reservation
California Department of Corrections
California Department of Fish & Game
California Integrated Waste Management Board
Caltrans
City of Banning, Department of Planning
City of Blythe
City of Cathederal City
City of Coachella
City of Desert Hot Springs
City of Indian Wells
City of La Quinta
City of Palm Desert
City of Palm Springs
City of Rancho Mirage
Coachella Valley Association of Governments
Coachella Valley Water District
County of Orange
County of Riverside, Planning Department
County of Riverside, Waste Resources Management Division
Department of Transportation
Department of Water Resources
Desert Fishes Council
Federal Energy Regulatory Commission
Imperial County, Planning Department
Long Range Planning California Highway Patrol
Los Angeles County Sanitation District
Management Assistance Office, Marine Corps Air Station
Martinez Reservation
Metropolitan Water District of Southern California
National Park Service, U.S. Department of the Interior
Native American Heritage Commission
OHMVR Commissioner
Orange County Integrated Waste Management
Regional Water Quality Control Board, Colorado River Basin Region 7
San Bernardino County, Planning Department
San Bernardino County, Solid Waste Management
San Diego County Air Pollution Control District
San Diego Department of Public Works
Santa Barbara County Air Pollution Control District
Santa Barbara County, Planning Department
Santa Barbara County, Solid Waste Management
South Coast Air Quality Management District
Southern California Association of Governments

Recipients of the Eagle Mountain Landfill and Recycling Center Final Environmental Impact Study/Environmental Impact Report

South Coast Resource Area, Bureau of Land Management
State Water Quality Control Board
State Water Resources Control Board
Tribal Chair, Morongo Reservation
Twentynine Palms Marine Corps Reservation
Union Pacific (Southern Pacific) Railroad
U.S. Army Corps of Engineers
U.S. Bureau of Reclamation
U.S. Environmental Protection Agency
U.S. Fish & Wildlife Service
Ventura County, Planning Department
Ventura County, Solid Waste Management

ELECTED OFFICIALS

Hon. Diane Feinstein, U.S. Senate
Hon. Barbara Boxer, U.S. Senate
Hon. Sonny Bono, U.S. House of Representatives
Hon. Ken Calvert, U.S. House of Representatives, 43th District
Hon. Jim Battin, California Assembly, 80th District
Hon. Brett Granlund, California Assembly, 65th District
Hon. George Runner, Senator (California), 36th District
Hon. David Kelley, Senator (California), 37th District
Hon. William Leonard, California Assembly, 63rd District
Hon. Jerry Lewis, U.S. House of Representatives 40th District
Hon. Bruce Thompson, California Assembly 66th District
Hon. Ron Pacheco, California Assembly, 64th District
Hon, Jim Brulte, Senator (California), 31st District
Riverside County Board of Supervisors and Planning Commission
Kathy Davis, San Bernardino County Board of Supervisors

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College of the Desert Library
Corona Public Library
Desert Hot Springs Public Library
Feldheym Central Library, San Bernardino Public Library
Government Documents Section, Riverside Central Library
Government Publications, California State Library
Government Publications, University of California, Riverside Library
Imperial County Library
Indio Branch Library
Joshua Tree Branch, San Bernardino County Library
Lake Tamarisk Branch Public Library
Los Angeles Public Library
Palm Desert Public Library
Palm Desert Public Library
Palm Springs Library Center

Recipients of the Eagle Mountain Landfill and Recycling Center Final Environmental Impact Study/Environmental Impact Report

Palo Verde Valley District Library
Rancho Mirage Public Library
Riverside Community College, Martin Luther King Library
San Francisco Public Library
U.S. Geological Survey Library
Yucca Valley Branch, San Bernardino County Library

ORGANIZATIONS

Aqua Caliente Indian Reservation
Bighorn Institute
Cadiz Land Company
California Native Plant Society
California Wilderness Coalition
Coachella Valley Audubon Society
Conservation Law Project
Defenders of Wildlife
Defenders of Wildlife
DERT
Desert Bighorn Council
Desert Citizens Against Pollution
Desert Protective Council
Desert Sun
Desert Tortoise Council
Desert Tortoise Preserve Commission
Environmental Defense Fund
Fit Environment
Friends of Wildlife
Gold Fields Mining Company
Greystone
Living Desert Reserve
Morongo Basin Conservation Association
National Parks Conservation Association
Natural Resources Defense Council
Press Enterprise
Regional Representative Sierra Club
San Bernardino Audubon Society
San Bernardino County Museum
Sierra Club, Washington, D.C.
Sierra Club, San Gorgornio Chapter
Sierra - Mountain
Sierra Club Legal Defense Fund
Sierra Club, San Diego Chapter
State Lands Commission
Desert Survivors
Wilderness Society
Wildlife Society

INDIVIDUALS

Joey Acuna Jr., Coachella, CA
Patricia Aiken, Desert Center, CA

Recipients of the Eagle Mountain Landfill and Recycling Center Final Environmental Impact Study/Environmental Impact Report

Jose R. Allen, San Francisco, CA
Tom Allen, La Quinta, CA
Rita Baker, Oceanside, CA
Frank Barbaro, Chicago, IL
Donald Beckermann, La Cresenta, CA
Mary Belardo, Thermal, CA
Dana Bell, Long Beach, CA
Jerri Bowles, Indio, CA
Charles Boyd, Riverside, CA
Noel Brush, Desert Center, CA
Mary Burns, California Desert Advisory Council, Mira Loma, CA
Isabella Burns, California Desert Advisory Council, Mira Loma, CA
Rita Burrill, California Desert Advisory Council, Joshua Tree, CA
Ray Butler, Riverside, CA
Christian Caraher, Twentynine Palms, CA
Mike Cardona, Cathedral City, CA
Lawrence and Donna Charpied, Desert Center, CA
I.M. Chelette, Joshua Tree, CA
Joseph Chesler, Burbank, CA
Dick Conti, California Desert Advisory Council, Eagle Rock, CA
Johnney Coon, Desert Center, CA
Buford Crites, California Desert Advisory Council, Palm Desert, CA
Ian Davidson, California Desert Advisory Council, Riverside, CA
James Dodson, Lancaster, CA
Mrs. Don Ebert, Idyllwild, CA
Nick Ervin, California Desert Advisory Council, San Diego, CA
Lee Ann Fenfro, Indio, CA
Mary Ellen Ferguson, Indio, CA
Melanie Fesmire, Indio, CA
Robert Filler, Yuma, AZ
Grace Fong, Santa Ana, CA
Don Frank, Palm Springs, CA
Ruth Frick, Mountain View, CA
John Geddie, Albuquerque, NM
Rita Gentry, Murietta, CA
William W. Glauz, California Desert Advisory Council, South Pasadena, CA
George Hague, Moreno Valley, CA
Joann Harding, Santa Barbara, CA
Edi Harmon, Ocotillo, CA
Steven Hartman, California Desert Advisory Council, Sherman Oaks, CA
Susan Hickman, Yuma, AZ
John Hohstadt, Needles, CA
Dollie Irwin, Banning, CA
Bill Jessup, Oasis, CA
Bryn Jones, Beaumont, CA
Malcolm Jones, Jr., Laguna Niguel, CA
Susan Jordan, Oakland, CA
W. Douglas Kari, Los Angeles, CA
Peter Kirakos, Redlands, CA
Ray Kirham, Twentynine Palms, CA
Dr. Susan Klage, Palm Desert, CA
Phil Klask, San Francisco, CA

Recipients of the Eagle Mountain Landfill and Recycling Center Final Environmental Impact Study/Environmental Impact Report

Fred Knowlin, Santa Ana, CA
Katherleen Koop, Palm Desert, CA
David Lanham, Riverside, CA
Rheo Lawman, Palm Desert, CA
Betsey Lindsay, Mission Viejo, CA
Ruth Lopez, Needles, CA
Ernie Lopez, Jr., Coachella, CA
Arthur Lowe, Rancho Mirage, CA
Richard Marsh, Indio, CA
Arthur Mathern, Perris, CA
G. Michael McCarthney, Sausalito, CA
Stacy Jo McDermott, San Francisco, CA
Lawrence McHenry, Phoenix, AZ
Ann McKibben, Moreno Valley, CA
Wendy McQuinn, Yucca Valley, CA
Marjorie Mickles, Upland, CA
Victor Millmen, Palm Desert, CA
Sylvia Montenegro, Coachella, CA
Joel Moskowitz, Los Angeles, CA
Emily Nelson, M.D.
Robert Newfield
Gerald Quick, El Centro, CA
Jim Reddy, California Desert Advisory Council, Lucerne Valley, CA
Irv Richards, Riverside, CA
Dan and Robert Roman, Indio, CA
Joe Roman, Palm Springs, CA
John Rotenberry, Riverside, CA
Margit Baldivid Rusche, Bloomington, CA
Vince Samon, Palm Desert, CA
Patricia Shifferle, San Francisco, CA
Ami Searle, Fontana, CA
William Selman, Bermuda Dunes, CA
Charla Shamhart, Yucca Valley, CA
David Sharp, California Desert Advisory Council, Hesperia, CA
Sam Sharp, Holtville, CA
Lynne Shmakoff, Twentynine Palms, CA
Jerry Smith, Twentynine Palms, CA
Glenn R. Stewart, Pomona, CA
Jon Stone, California Desert Advisory Council, Winchester, CA
Jeff Thompson, Irvine, CA
Carolyn Toenjes, Palm Springs, CA
Lillian Trewick, Redlands, CA
Will and Mickey Truitt, Desert Center, CA
Marsha Turoci, San Bernardino, CA
Jackie Underwood, San Jacinto, CA
Kurt Van Epps, Lakewood, CA
Helen Wagenvoord, Oakland, CA
Richard Warner, Palm Springs, CA
Ronda Woodside, Riverside, CA

United States Department of the Interior

NATIONAL PARK SERVICE
Joshua Tree National Park
74485 National Park Drive
Twentynine Palms, California 92277-3597

IN REPLY REFER TO:

L7617

November 6, 1996

Mr. Thomas L. Peters, AICP
CH2Mhill
3 Hutton Center Drive
Suite 200
Santa Ana, California 92707

RECEIVED
NOV 08 1996
CH2M HILL
SOUTHERN CALIFORNIA OFFICE

Ref: Eagle Mountain Response to Comments

Dear Mr. Peters:

As requested the following responses are provided by Joshua Tree National Park, a Cooperating Agency under the National Environmental Policy Act, to the Bureau of Land Management in preparation of the EIS/EIR for the Eagle Mountain Landfill and Recycling Center Project.

Response to specific questions from the Conservation Law Project letter of 9-17-96.

1. Question: Has JTNP attempted to estimate use of the wilderness areas over the next 50 to 100 years?

   Response: No estimate has been made.

2. Question: Are the results form ongoing JTNP research on desert tortoise available?

   Results from desert tortoise census research is currently under going analysis and peer review. Final results should be published by the summer of 1997.

3 Question: Are there any additional updated maps showing proposed or designated uses for the areas near the proposed landfill?

   Response: None that the park is aware of.

Response to specific questions to the Truitt letter of 9-12-96.

1. Question: Does JTNP have any other historical or anecdotal evidence of biological impacts associated with historic mining activities?

Response: Historical or anecdotal evidence of biological impacts exists in the "Lost Horse Gold Mill, HAER No. CA-128" report completed as part of the Historic American Engineering Record (HAER) 1992 project in Joshua Tree National Park. It discusses the disappearance of the pinyon/juniper forest in and around the Lost Horse Mill site as a direct result of mining and milling activity.

2. Question: Does JTNP or NPS have any calculations or other data to support the conclusion that the implementation of the JTNP Management Plan will not create potentially significant adverse air quality effects?

Response: The NPS does not operate any major emitting facilities of PM10 in the park. The NPS is not engaged in activities that may generate fugitive PM10 emissions. No new campgrounds, picnic areas, or roads are proposed to be constructed. The Park will close several secondary dirt roads located within wilderness, and will reduce the number of dirt roads available to four wheel drive use. Management actions will help to reduce fugitive PM10 emissions.

3. Question: Are there ongoing ecosystem monitoring and research efforts underway by JTNP?

Response: Yes. JTNP is currently involved in gathering data pertaining to air and water quality, desert tortoise abundance, desert tortoise reproduction, vegetation mapping, and restoration of disturbed lands.

4. Question: What other sources of funding exist for JTNP to provide continuing research (assuming the Eagle Mountain Landfill project does not proceed)?

Response: Grant funding from foundations, non-profit organizations, private benefactors, state and federal agencies, National Park Association, and other miscellaneous sources.

5. Question: Does JTNP intend to halt development on private lands within the Park?

Response: The preservation of unimpaired natural systems and cultural resources is the essential management objective of JTNP. Commercial use of lands within the Park is incompatible with the accomplishment of Park objectives. Development that is consistent with a plan of operation (for mining) or rights of use and occupancy of a private dwelling within a National Park is authorized. The NPS will seek to purchase private lands within the Park from willing sellers for fair market value.

6. Question: Please provide a response to the questions concerning the previous MOU in the second paragraph on page 2?

Response: JTNP does not support the landfill project and has not entered into a

agreement with the project proponents.

Should you have any questions please me at (619) 367-6376.

Sincerely,

Ernest Quintana

Ernest Quintana
Superintendent
Joshua Tree National Park

cc: Doug Romoli/BLM
Joan Oxendine/BLM
David Mares/Riverside County
Matt Wagers/NPS

United States Department of the Interior

OFFICE OF THE SOLICITOR
Pacific Southwest Region
2800 Cottage Way
Room E-2753
Sacramento, California 95825-1898

IN REPLY REFER TO:

TAKE PRIDE IN AMERICA

February 2, 1993

MEMORANDUM

TO: State Director, Bureau of Land Management, California

FROM: Regional Solicitor, Pacific Southwest Region

SUBJECT: Eagle Mountain Project - Kaiser Steel Exchange

Your memorandum of January 19, 1993, requests my opinion on several questions of law concerning the proposed exchange of lands with Kaiser Steel Corp. The public lands and interest in the lands proposed for disposal, were patented to Kaiser Steel Corporation pursuant to the authority of Private Law 790 (66 Stat. A129) and contained a reservation of all minerals and a reversionary clause which provided for the return of title to the United States if Kaiser or its successors did not use the property for a continuous period of seven years as a camp site or mill site or for other incidental purposes in connection with Kaiser's mining operations. You have also advised that Kaiser issued a surface lease for the operation of a correctional facility and received compensation therefore.

To properly answer your inquiry, one must determine what interest Kaiser has in the property and what interest remains in the United States. An examination of Private Law 790, supra, and the patent issued to Kaiser discloses that Kaiser received the surface estate, subject to the possibility that that estate might revert to the United States. The control of the reversion rests with Kaiser, however, I am of the opinion that the surface estate will not revert to the United States automatically, but would only revert upon the election of the Secretary, based upon a finding that the facts support the applicability of the reversionary clause. The factual evidence furnished by Kaiser leads to the inescapable conclusion that the conditions of the reverter have not been triggered.

In view of the fact that Kaiser received full and complete title to the surface estate, subject only to the possibility of reverter, I am of the opinion that Kaiser's lease of a portion of the property for the operation of a correctional facility was well within the rights granted to Kaiser by the patent. Kaiser received full possessory interest in the surface of the property

and had the right to utilize that surface at its discretion, subject only to the conditions of the reverter clause.

The remaining question concerns the value to be given to Kaiser's interest in the property. The United States has reserved title to the mineral estate in the property and has the right to reacquire the surface estate of the property should Kaiser not utilize a portion of the property as a mining camp, mill site, etc. Kaiser may exchange only its surface estate with the United States and may be given credit only for the value of the surface estate less the improvements placed upon the property by Kaiser. I will be pleased to work with your appraiser in properly valuing Kaiser's interest in this property.

John W. Burke, III
Regional Solicitor
Pacific Southwest Region

By: Burton J. Stanley
Assistant Regional Solicitor

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Field Office
2730 Loker Avenue West
Carlsbad, California 92008

TO		INIT	DATE
	DM		
	DSR		
	PA		
	ADMIN		
/	RC&W		
	P&RR		
	L&M		
	AMs		

RETURN TO:

September 30, 1996

Memorandum

To: Henri R. Bisson, District Manager, California Desert District Office, Bureau of Land Management (BLM), Riverside, California

From: Acting Gail C. Kobetich, Field Supervisor

Subject: Review and Comment on the Environmental Impact Statement (EIS) for the Eagle Mountain Landfill and Recycling Center Project (1-6-96-TA-319).

The Fish and Wildlife Service (Service) has reviewed the information provided in your EIS, dated July 1996, on the referenced project. The primary concern and mandate of the Service is the protection of fish and wildlife resources and their habitats. The Service is also responsible for administering the Endangered Species act of 1973, as amended (Act).

The proposed project involves the conversion of an existing unused open pit iron ore mine to a Class III, non-hazardous, solid waste landfill. The landfill operation would be located at the now inactive Eagle Mountain Mine in northeastern Riverside County.

The Service addressed impacts to federally listed endangered and threatened species in Biological Opinion dated September 10, 1992 (1-6-92-F-39). In a memorandum to the BLM dated September 20, 1993, the Service also concluded that, "the mitigation measures proposed by the Bureau of Land Management, the project proponent, and the terms and conditions of the Biological Opinion (1-6-92-F-39) adequately offset impacts to proposed critical habitat". The project description in the EIS has not changed significantly to warrant additional comments referencing desert tortoise or desert pupfish. New survey information of desert tortoise in new areas in the project vicinity and the recent designation of critical habitat shall be investigated but at present the Service sees no need to reinitiate consultation pursuant to section 7 of the Act.

The term "Mitigation Trust Fund", referenced throughout the EIS, states that monies from this fund will be used for habitat acquisition (85%) and for monitoring (15%). A full discussion is needed on how this fund will be utilized and spent. A portion of the 15% of "Monitoring Funds" should be specifically identified for implementation of findings from the monitoring program.

There should be a full discussion outlining monitoring strategies, reporting guidelines and time frames, and identifying responsible parties and specific responsibilities in the EIS. The monitoring

plan should provide for submittal of annual progress reports to ensure that monitoring is carefully conducted, that the data are of high scientific quality and value, and that these standards are maintained over the duration of the project.

The Service appreciates the opportunity to comment on this project. If you should have any questions pertaining to these comments, please contact Karen Jensen at (619) 431-9440.

1-6-96-TA-319

DEPARTMENT OF FISH AND GAME
Region 5
330 Golden Shore, Suite 50
Long Beach, California 90802
(310) 590-5113

September 3, 1996

U.S. Department of the Interior
Bureau of Land Management
California Desert District
Attn: Joan Oxendine
6221 Box Springs Boulevard
Riverside, California 92507

Mr. David Mares
County of Riverside Planning Department
4080 Lemon Street, 9th Floor
Riverside, California 92501

Dear Ms. Oxendine and Mr. Mares:

Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR)
Eagle Mountain Landfill and Recycling Center Project
SCH 95052023, Riverside County

The Department of Fish and Game (Department) has reviewed the above-referenced document. The project proposes to convert an existing, unused open-pit iron mine to a Class III non-hazardous solid waste materials landfill. The 4654-acre project site is located in the Eagle Mountains, in north eastern Riverside County, California. The Department is generally satisfied with the scope of the project but, there are some issues of concerns. The Department would like to comment on general and specific issues, for incorporation into the final EIS/EIR.

VEGETATION

ALVERSON'S FOXTAIL CACTUS: The Alverson's foxtail cactus (***Coryphantha Vivipara var. Alversonii***) transplant proposal remains highly experimental. This practice is neither recognized by the California Native Plant Society, nor the Department. This species is a candidate for listing, and a Bureau of Land Management (BLM) sensitive species. Transplant failures would result in a direct resource loss unacceptable to the Department and prevents recognition of transplantation as viable mitigation for impacts to this species. The document needs to fully address and disclose acceptable mitigation for this species (Sect. 1.7 pages 1-53, Sect. 3.7.2.1 pages 3.7-4 through 3.7-10, Appendix G, and all corresponding text).

CALIFORNIA BARREL CACTUS: The complete lack of an adequate discussion, inclusive of impacts and mitigation, for the California barrel cactus (***Ferocactus acanthodes var. acanthodes***), a BLM sensitive species, is not acceptable to the Department. This issue needs to be fully addressed in the document. Furthermore, the net resource loss of over 600 individuals of this species as being insignificant is also unacceptable to the Department (Sect. 3.7.2.1 pages 3.7-4 through 3.7-10, Appendix G, and all corresponding text).

OROCOPIA SAGE: The mitigation/compensation proposed for the Orocopia sage (***Salvia greatae***), a BLM sensitive species, appears to be adequate but should clearly state that no net loss of this species may occur. The value of thorough protection and management of all candidate and sensitive species is the potential elimination of the need to list these species. Appropriate proactive mitigation strategies are recommended for all candidate species and required for all listed species on the proposed project site (Sect. 3.7.2.1 pages 3.7-4 through 3.7-10, Appendix G, and all corresponding text).

The California Environmental Quality Act (CEQA) Guidelines, §15380 states that all sensitive or candidate species be considered as though they were listed species if a proposed project may further reduce their numbers. The draft EIS/EIR does not meet this criteria to provide adequate analysis and mitigation for the three above-referenced species.

ANIMAL SPECIES

NELSON'S BIGHORN SHEEP: The loss of 944 acres of Nelson's bighorn sheep (***Ovis canadensis nelsoni***) habitat is unacceptable to the Department and avoidance of this significant loss is recommended. If this direct impact continues to be preferred by the applicant, substantial mitigation/compensation to offset the direct habitat loss will be appropriate and necessary prior to project initiation and therefore, must be fully disclosed in the document.

Any on-site introduction of domestic livestock by residents living at the proposed project is unacceptable to the Department. The document should clearly read and state that this includes cattle, domestic sheep, swine and domestic goats. Exposure and possible transmittal of known diseases carried by these animals to the existing population of bighorn sheep could result in the extirpation of the entire population (page 4.7-30, and all corresponding text). In addition, domestic dogs need to be restrained and controlled at the townsite so bighorn sheep are not harassed or killed by free-roaming or feral dogs. The document does not address this issue.

The Department, in addition, recommends that the document should include a minimum of four new reliable water sources, as partial mitigation for bighorn sheep habitat which will potentially be lost due to the project. Two of the water sources should be installed on the mountain adjacent to the project area, and the two others along the rail service. Divine and Douglas' report (Bighorn Sheep Monitoring Program for the Eagle Mountain Landfill Project, Phase I, 1996) suggests placement be north of the landfill, and at the top of Placer Canyon. The Department recommends that these two drinkers be in place and functioning prior to the start of operations (pages 4.7-29 through 4.7-30, and all corresponding text). The two sites along the rail service shall be designated by Department biologists. Prior to installation, site location and design need to be approved by the Department. The responsible parties for building, maintaining, and filing all these water sources must be clearly stated in the document.

If the new water sources do not fill by natural precipitation, they must be filled manually by transporting water so that they can continue to meet their design objectives. A "four time" replacement clause should be included in the document to ensure that the drinkers continue to function efficiently over the life-span of the project (pages 4.7-29 through 4.7-31, and all corresponding text). Installation and maintenance of said water sources, however, do not alleviate maintenance responsibilities for Buzzard Spring, or Eagle Tank by the project proponent.

Potential adverse impacts to bighorn sheep associated with reimplementation of rail service are not fully considered in the document. This is inconsistent with CEQA Guidelines, §15130 which requires full disclosure of all direct, indirect, and cumulative adverse impacts of a proposed project. This issue must be adequately addressed in the document.

The Department considers the discussion dealing with train service to be inadequate. The area between the Coachella Canal Bridge and Highway 10 is a known migration corridor. The DEIR, however, does not discuss the speed parameters at which trains will be traveling nor associated potential impacts to this migration corridor. This issue needs to be fully discussed. The Department strongly recommends that trains not be allowed to stop between these two points except under emergency conditions (pages 4.7-30, Appendix G pages 5-15, and all corresponding text).

The Department deems the three-day notification for deer or bighorn sheep killed by rail service to be totally inadequate. Immediate notification is required so that biological data and samples can be collected from the carcass (pages 4.7-30). Also, the Department recommends that the current, ongoing monitoring study be continued due to the longevity of this project. This should be discussed and included in the document for bighorn sheep for the duration of the project as part of the mitigation process.

MOUNTAIN LIONS: The document fails to address the presence of Mountain Lion (***Felis Concolor***) at the project site. Both visual sightings and pug marks have been identified and verified by Department personnel (Mulchay, 1994, 1995) on the project site. A full discussion and mitigation strategy must be developed and included in the document (page 3.7-14, Appendix G, and all corresponding text).

BATS

The Department believes that two additional responses regarding mitigation for the California leaf-nosed ba (***Macrotus Californicus***), a candidate species and a California Species of Special Concern need to be addressed and included in the document. The following are the Department's comments pertaining to this issue:

The document states, "For biological resources, the loss of the Kaiser Mine Adit for bat roost habitat is considered a significant impact that cannot be mitigated." This is an unverified statement which is unacceptable because it fails to comply with relevant CEQA statutes. CEQA Statute, §21080 requires that expert testimony and opinions be substantiated by facts. Section 21080(e) states:

"Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous, or evidence of social or economic impacts which do not contribute to, or are not caused by, physical impacts on the environment, is not substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts."

If the project proponent maintains this position and fails to mitigate in good faith, then a "Statement of Overriding Consideration" supported by written findings (see CEQA Guidelines, §15091) should be prepared, circulated, and included in the final EIS/EIR (Errata sheet pages 1-41 Sect. 1.6, page 2-68 Table 2-5). However, as stated above, this position does not constitute substantial evidence, and therefore cannot be used for findings in support of a "Statement of Overriding Consideration" (see CEQA Guidelines, §15093).

The Department recommends the immediate opening of the Black Eagle Mine Adit. The adit should be gated with a Department-approved "bat gate" and monitored by a Department-approved biologist. The Department believes that careful monitoring will determine that this species, currently found in the Eagle Mountain Adit, will recolonize the Black Eagle Adit from which it most likely originated.

After monitoring has determined whether recolonization has or has not occurred, a third option is available. Mitigation Trust Funds should be set aside to provide for the option of digging a new adit that meets the specific habitat requirements needed by this species as a over-wintering roost and/or maternity roost.

The proposed extension of the adit opening through the landfill trash mass is unacceptable to the Department. The Department believes that this effort, with high probability, will fail at a great expense to the project proponent. Lastly, the Department believes that if any/or all of the above mitigation suggestions are incorporated into the project all other bat species identified for the project site will benefit.

GENERAL COMMENTS

Throughout the document, it is stated that the "Mitigation Trust Fund" will be utilized for habitat acquisition (85%) as well as for monitoring (15%) and is part of the project mitigation. A full discussion of how these funds will be utilized and spent needs to be clearly detailed and fully disclosed. A portion of the 15% of "Monitoring Funds" must be specifically identified for implementation of monitoring findings (e.g. construction costs for habitat improvements dictated through the monitoring process throughout the project scoping area and for the project duration). This provision is not identified in the document. It must be discussed and included in the document.

The Department recommends that a thorough discussion of the monitoring plan outlining monitoring strategies, reporting guidelines and time frames, and identifying responsible parties and specific responsibilities be fully disclosed in the document. The monitoring plan should provide for submittal of annual progress reports to ensure that monitoring is carefully conducted, that the data are of high scientific quality and value, and that these standards are maintained over the duration of the project (Appendix M pages 1 through 18).

The proposed landfill project has a large sphere of influence and the potential to adversely impact many listed and candidate species that rely on desert habitat for their existence. Due to the above-mentioned inconsistencies and concerns regarding the current document, it is the recommendation of the Department that the draft EIS/EIR for the Eagle Mountain Landfill Project be reevaluated and resubmitted for public review.

Lastly, the Department's unit fishery biologists were unable to provide comments, at this time, regarding both the State-listed threatened Desert tortoise (***Gopherus agassizii***) and the State-listed endangered Desert pupfish (***Cyprinodon macularius***), due to their workload. Comments regarding these two State-listed species will be forwarded in the near future. The Department apologizes for any inconveniences this may present and appreciates your patience and cooperation.

Thank you for the opportunity to review and comment on this project. We request a copy of your response to our comments and/or the final EIR immediately upon approval and prior to filing the Notice of Determination. If you have any questions please contact Mr. Gerald P. Mulcahy, Associate Wildlife Biologist, at (619) 922-5613 or Ms. Lilia I. Martínez, Environmental Specialist III, at (310) 590-4830.

Sincerely,

Patricia Wolf
Acting Regional Manager

cc: See attached list

cc: Mr. Gerald Mulcahy
Department of Fish and Game
Blythe, California

Ms. Nancy Andrew
Department of Fish and Game
Brawley, California

Mr. Vern Bleich
Department of Fish and Game
Bishop, California

Ms. Denyse Racine
Department of Fish and Game
Bishop, California

Mr. Frank Hoover
Department of Fish and Game
Chino, California

Ms. Sharon Keeney
Department of Fish and Game
Brawley, California

Mr. Jim Dice
Department of Fish and Game
San Diego, California

Ms. Rebecca Jones
Department of Fish and Game
Palmdale, California

U.S. Fish and Wildlife Service
Carlsbad, California

U.S. Army Corps of Engineers
Los Angeles, California

State Clearinghouse
Sacramento, California

STATE OF CALIFORNIA - THE RESOURCES AGENCY

PETE WILSON, Governor

DEPARTMENT OF FISH AND GAME
Region 5
330 Golden Shore, Suite 50
Long Beach, California 90802
(310) 590-5113

November 12, 1996

Ms. Kathy E. Freas, Ph.D.
Senior Ecologist
CH2M Hill
3 Hutton Centre Drive, Suite 200
Santa Ana, California 92707

Dear Ms. Freas:

Draft Environmental Impact Report/Statement (EIR/EIS)
Eagle Mountain Landfill and Recycling Center Project
SCH 95052023, Riverside County

The Department of Fish and Game (Department) is providing comment in response to your letter dated September 19, 1996 (attached). The letter describes changes which will be included in the final EIR/EIS. The Department concurs with these changes, however, we would like the following changes included or clarified:

BATS

At the September 17, 1996 meeting, it was agreed that if monitoring determined whether recolonization had occurred then the use of Mitigation Trust funds to provide for the creation of a new adit would be included as mitigation in the final EIR/EIS. The new adit would need to meet the specific habitat requirements needed by the California leaf-nosed bat (***Macrotus Californicus***) as an over-wintering and/or maternity roost.

DESERT TORTOISE

Page 4 of the letter states "During the meeting, it was decided that if the above-referenced document provides the basis for issuing Service handling permits, Department handling permits will not be required." The Department would like this statement clarified to reflect that where a "handling permit" is necessary, a California Endangered Species Act Memorandum of Understanding pursuant to Fish and Game § 2081 would be required. Also, the Department recalls that it was agreed that the Materials Reclamation Corporation (MRC) would develop a process that would allow the project to proceed in a timely manner if there is disagreement between the resources agencies. The idea for development of this process was reached because MRC expressed their concerns over delays. The Department is committed to participate to the greatest extent possible in the federal consultation process, in order to develop, whenever possible, consistent and compatible findings between the resources agencies.

DESERT PUPFISH

A funding source for the construction of the refugium at Deep Canyon Reserve must be identified in the final EIR/EIS before the start of operation at the landfill. This issue can be clarified by including language from the Memorandum of Understanding in the final EIR/EIS.

DRAFT MITIGATION TRUST FUND DOCUMENT

The Department also reviewed the draft Mitigation Trust Fund document. The Department requests the following items be addressed in the document:

1. Page 4, paragraph B should include the Department as the fourth entity. Presently, the Department is not identified.

2. Page 8, paragraph B should be eliminated. The Department suggests that the four agencies involved should be the representatives serving as the advisory committee with professional scientific input being provided by agency personnel. Final determination of the expenditure for land acquisitions and monitoring studies should rest solely with the responsible agencies.

The Department would agree with the changes proposed in your letter dated September 19, 1996 if the issues identified above are incorporated as well. The Department appreciates the opportunity to clarify these issues prior to the final EIR/EIS. If you have any questions, please contact Mr. Gerald P. Mulcahy, Associate Wildlife Biologist, at (619) 922-5613 or Mr. Lilia I. Martinez, Environmental Specialist III, at (310) 590-4830.

Sincerely,

Patricia Wolf
Acting Regional Manager

Attachment

cc: See attached list

cc: Mr. Gerald Mulcahy
Department of Fish and Game
Blythe, California

Ms. Lilia I. Martínez
Department of Fish and Game
Long Beach, California

Mr. Curt Taucher
Department of Fish and Game
Long Beach, California

Ms. Sharon Keeney
Department of Fish and Game
Brawley, California

Mr. Frank Hoover
Department of Fish and Game
Chino, California

Ms. Rebecca Jones
Department of Fish and Game
Palmdale, California

Mr. Jim Dice
Department of Fish and Game
San Diego, California

Mr. Doug Romoli
U.S. Bureau of Land Management
Riverside, California

U.S. Fish and Wildlife Service
Carlsbad, California

U. S. Army Corps of Engineers
Los Angeles, California

State Clearinghouse
Sacramento, California

CH2M HILL
3 Hutton Centre Drive
Suite 200
Santa Ana, CA
92707
Tel 714.429.2000
Fax 714.429.2050

CH2MHILL

Celebrating 50 Years

September 19, 1996

Ms. Patricia Wolf
Acting Regional Manager
California Department of Fish and Game
Region 5
330 Golden Shore, Suite 50
Long Beach, CA 90802

Dear Ms. Wolf:

Subject: Draft EIS/EIR Eagle Mountain Landfill and Recycling Center Project

On September 17, 1996, representatives of the Department of Fish and Game (Department), US Bureau of Land Management (BLM), Mine Reclamation Corporation (MRC), and CH2M Hill met to discuss the Department's September 3 comment letter on the Draft EIS/EIR for the Eagle Mountain Landfill and Recycling Center Project. The purpose of the meeting was for the EIS/EIR consultant to clarify the Department's September 3 comments for purposes of preparing responses to comments as required by NEPA and CEQA.

Additionally, comments on treatment of desert tortoise and desert pupfish in the Draft EIS/EIR that were not completed in time to be included in the comment letter were discussed. Attendees at the meeting included:

Curt Taucher/Department	Gerry Mulcahy/Department
Frank Hoover/Department	Sharon Keeney/Department
Lilia Martinez/Department	Doug Romoli/BLM
Larry Foreman/BLM	Gary Johnson/MRC
Paul Selzer/SEH&B	Kathy Freas/CH2M Hill

Consensus was reached on treatment of each of the comments in the September 3 letter and on verbal comments provided at the meeting for the Final Environmental Impact Statement (FEIS). The FEIS should reflect the following changes (as summarized below).

Alverson's foxtail cactus

In Section 4.7 of the FEIS, the discussion will include results of experimentally transplanted Alverson's foxtail cactus at the project site. These results indicate 100% survival of transplanted individuals two years following transplant. Additionally, 95% of these transplanted individuals have flowered following transplanting. Additional mitigation for Alverson's foxtail cactus will be described in the FEIS to include collection of seed from transplanted individuals. Seed shall be stored under appropriate temperature and humidity at Department of Biology, University of California, Riverside, or similar institution. Survivorship of transplanted individuals shall be monitored for five years following transplanting. The transplant shall be considered successful if survivorship after five years meets or exceeds 75%. Should this rate of survival be achieved, stored seeds may be discarded. Should survivorship after five years be less than 75%, the stored seed shall be used to produce new individuals to replace the number of individuals that did not survive five years after the transplant.

California barrel cactus

In Section 4.7 of the FEIS, the discussion of impacts to and mitigation for California barrel cactus that would be lost as a result of the project will be clarified to indicate that approximately 600 individual of this species would be lost over the approximately 100 year life of the project, rather than lost at one time. Mitigation will include transplanting individuals located within the area included in the active phase of the project as the project proceeds through each phase. These transplants would occur according to procedures acceptable for transplanting cacti. During the reproductive season prior to transplanting, seeds from individuals to be transplanted will be collected and stored under appropriate temperature and humidity at Department of Biology, University of California, Riverside, or similar institution. Survivorship of transplanted individuals shall be monitored for five years following transplanting. The transplant shall be considered successful if survivorship after five years meets or exceeds 75%. Should this rate of survival be achieved, stored seeds may be discarded. Should survivorship after five years be less than 75%, the stored seed shall be used to produce new individuals to replace the number of individuals that did not survive five years after the transplant.

Nelson's bighorn sheep

The FEIS will more clearly describe the project feature that maintains 644 acres of natural habitat as a buffer zone surrounding the landfill site. Mitigation for loss of bighorn sheep habitat includes acquisition of appropriate habitat through the Environmental Mitigation Trust.

Existing wording in Section 4.7 of the DEIS that identifies mitigation measures for Nelson's bighorn sheep will be clarified in the FEIS as recommended in the Department's comment letter to include specific domestic livestock at the Townsite, including cattle, domestic

sheep, swine, and domestic goats. Additionally, existing wording that identifies restraint of dogs or other large pets, will be adjusted as recommended in the comment letter to include restraint and control of dogs at the Townsite so that bighorn sheep are not harassed or killed by free-roaming or feral dogs.

Mitigation to compensate for loss of water sources at the site will include four water sources, two near the project site in the Eagle Mountains at locations identified in the comment letter and Divine and Douglas (1996), and two along the rail spur at locations to be determined in coordination with Department biologists. The location of the two identified water sources will be described as being placed north of the landfill and at the top of Placer Canyon.

The tank design for the water source preferred by the Department, that of Leon Lesicka, will be identified in the mitigation section of the FEIS. A "four time" replacement requirement for the tanks be added to the mitigation section such that the water sources would be functional throughout the life of the project. Mitigation that requires that the water sources be filled by MRC when natural runoff is insufficient to maintain their function will be added.

The average speed of trains going to and from the landfill site through the migration corridor between Coachella Canal Bridge and Highway 10 will be included in Section 4.7 of the FEIS in the existing discussion of loss of individual animals from train kill. Those speeds will be identified as an average of 20 mph going to the site and an average of 40 mph going from the site.

In Section 4.7of the FEIS language will be changed to require notification of the Department of sheep injured or killed by a train within one working day rather than three working days as the document currently specifies.

Mountain lion

Section 3.7 of the FEIS will indicate the presence of a mountain lion at the project site based on visual sightings and pug marks at the well. The discussion will include reference to Proposition 117, section 6, identifying mountain lions as specially protected. Section 4.7 of the FEIS will identify mitigation for loss of mountain lion habitat over the life of the project as a priority for land acquisition under the Environmental Mitigation Trust. The section will indicate that this mitigation would reduce impacts to mountain lion from loss of habitat to less than significant.

Bats

Existing mitigation for impacts to bats identified in Section 4.7 of the DEIS (which includes (1) extending the Eagle Mountain adit , (2) limiting access to the adit, and (3) using Environmental Mitigation Trust funds to monitor summer and winter populations, identify and permanently protect suitable roosting and/or maternity habitat, and to establish any

further measures that may be required by future monitoring) will be changed in the FEIS. Mitigation identified in the Section 4.7.3.3 of the FEIS will not include extension of the Eagle Mountain adit, because the Department 's current information based on accumulating data from other projects indicates that this measure will be unsuccessful. Mitigation recommended in the Department's comment letter and by Brown (1996), which was provided subsequent to the release of the DEIS, will be added to Section 4.7 of the FEIS. This mitigation includes immediate opening of the Black Eagle Mine adit as a potential alternative winter roost site for California leaf-nosed bat. Opening the Black Eagle Mine adit will include gating the opening with a Department-approved "bat gate" and monitoring by a Department -approved biologist. The FEIS also will state that these mitigation measures are those recommended by the Department and Brown (1996) as most likely to be effective, but that the potential exists that sufficient winter roosting habitat will not be provided by these mitigation measures, thus the finding of a potential significant impact, as discussed in the DEIS, will not be changed.

Desert tortoise

The Department's requirements for handling all tortoises will be in accordance with the 1994 Guidelines for Handling Desert Tortoises During Construction Projects (Service, Revised 1996). It was noted that MRC's biological consultant, RECON, procured a Department desert tortoise handling permit in 1993. During the meeting, it was decided that if the above referenced document provides the basis for issuing Service handling permits, Department handling permits will not be required. The change in reference will be made in Section 4.7.3.3 of the FEIS.

The Department requested that they be included as a full partner with the Service and BLM in the approval of the location of the 375 acres of tortoise habitat on the Chuckwalla Bench intended to mitigate the loss of 150 acres of habitat resulting from improvements to Eagle Mountain Road. This will be added to section 4.7.3.3 of the FEIS.

The Department requested that their approval, in addition to that of the Service and BLM, be required for the design and location of tortoise barriers and culverts, and wording of the monitoring of the monitoring program be included in the FEIS. Potential problems related to from possible lack of consensus among agencies on these details and potential delays that could result were discussed. In the meeting, it was decided that language requiring approval of the Department on these issues would not be added to the FEIS.

Desert pupfish

The Department recommended that the FEIS identify that individuals collected for establishing the population at the Deep Canyon Reserve be from the Dos Palmas population or from populations from other refugia rather than from the Salt Creek population near the

Eagle Mountain Railroad crossing. Because this is an internal Department decision, it was decided that identification of the source of the individuals for the Deep Canyon Reserve would be determined by the Department.

It was agreed that, given the resolution of these issues as identified in this letter, the Department would issue a subsequent letter to be included in the FEIS. That letter would identify the Department's agreement that clarifications in the FEIS as identified in this letter would satisfy their requirements and recommendations included in their September 3 comment letter and would preclude the need to recirculate the DEIS.

We appreciate the Department's willingness and cooperation in meeting to address issues raised in the September 3 letter. If you should have questions regarding this letter, please contact me at (916) 920-0212 x 223.

Sincerely,

Thomas Peters/for

Kathy E. Freas Ph. D.
Senior Ecologist
CH2M Hill

cc: Doug Romoli/BLM
Dave Mares/Riverside County
Curt Taucher/CDFG
Gary Johnson/MRC
Tom Peters/CH2M HILL

KENNETH L. EDWARDS
CHIEF ENGINEER

1995 MARKET STREET
P.O. BOX 1033
TELEPHONE (714) 275-1200
FAX NO. (714) 788-9965

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

RIVERSIDE, CALIFORNIA 92502

June 4, 1992

RECEIVED
JUN 1 4 1995

CM Engineering
Post Office Box 6087
San Bernardino, CA 92412

Attention: Ms. Denise Simmons

Ladies and Gentlemen:

Re: Eagle Mountain Landfill
Specific Plan 252

I am in receipt of your memo dated May 15, 1992 concerning hydrological parameters for the referenced project.

In regard to the use of a 1-hour storm for design purposes, I am of the opinion that the drainage area for Eagle Creek (6± square miles) is too large to be represented accurately by such a short duration event. I would not go so far as to say that the use of a 1-hour storm should be excluded from consideration anywhere in the project, but in larger drainage areas (>2 square miles), I believe it is inappropriate.

With respect to the soil loss rate to be used in this area, because of my limited study of the site, I would stop short of recommending a value. I do believe, however, that a loss rate calculated using an AMC III condition is very conservative for a desert area. It is generally acceptable to consider an AMC II type condition for most storms in the 10-year to 100-year frequency range. In a desert setting such as this, where short duration summer thunderstorms may be the rule, a case might be made for using AMC I. However, in this case, where storm volume is also of concern, I believe a somewhat conservative value is warranted and I would, therefore, suggest the use of AMC II in loss rate calculations.

Lastly, your memo discusses selecting a 100-year, 3-hour point rainfall value. As you know, rain gauge data (especially short duration) for the area is very limited. I did, however, review the data available and based on that I believe the 100-year, 3-hour value of 2.08 inches, which you are using, is somewhat low. I have examined the short duration values for the nearby Hayfield Pump Plant precipitation gauge, the predicted NOAA ratios (i.e., the relationship of the 1-hour, 3-hour and 6-hour duration storms to the 24-hour storm) for the general area, and the long duration records for the Eagle Mountain gauge. Based on this information, it would be my judgment that the following rainfall depths (unadjusted) be used for the Eagle Creek watershed:

100-year, 1-hour: (where appropriate)	1.77 inches
100-year, 3-hour:	2.47 inches
100-year, 6-hour:	2.76 inches
100-year, 24-hour:	3.68 inches

If you have any other questions please call me at 714/275-1275.

Very truly yours,

DUSTY WILLIAMS
Senior Civil Engineer

c: Riverside County Waste Management
Attn: Robert Nelson, Director
RCFC&WCD
Attn: Clyde Johnson

DW:bjp:seb
dw10519a

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
California Desert District Office
6221 Box Springs Boulevard
Riverside, California 92507-0714

8100
(CA-066.23)

CERTIFIED MAIL NO. P029 433 864
Return Receipt Requested

Ms. Cherilyn Widell
State Historic Preservation Officer
P. O. Box 942896
Sacramento, CA 94296-0001

Dear Ms. Widell:

In accordance with the Programmatic Agreement between the Bureau of Land Management (BLM) and the Office of Historic Preservation, the BLM wishes to re-open consultation on the Eagle Mountain Landfill project (SHPO No. BLM910826B). BLM proposes to convey through exchange its reversionary interest to patented Townsite lands owned by Kaiser Eagle Mountain, Inc. (Kaiser) at Eagle Mountain, Riverside County, California. The reversion clause in the deed stipulates that ownership of the Townsite lands will revert to the United States at a point seven years after mining related activities cease at Eagle Mountain. Mining related activities currently have not ceased.

As background, BLM initiated consultation with your office in August, 1991, regarding cultural resources that may be affected by a proposed land exchange with Kaiser. Kaiser proposed to develop the Eagle Mountain Open Pit Iron Mine into a solid waste disposal site and wanted to acquire adjacent public lands for the project. In the proposed land exchange, BLM was offered lands considered beneficial as critical desert tortoise habitat. Surveys of the Area of Potential Effect identified one prehistoric site which was determined to be not eligible for listing on the National Register. Your office concurred with this finding in a letter dated September 10, 1991.

Subsequent to this finding, the San Diego Superior Court has ruled that the Environmental Impact Report should include the Eagle Mountain Townsite in the Project description and analyze the environmental impacts of the proposed landfill project in conjunction with environmental impacts resulting from renovation of the Townsite caused by the landfill. The Townsite was not included in the Area of Potential Effect in the previous consultations with your office. In the original undertaking, BLM's only action with regard to the Townsite involved conveying a reversionary interest in the land: however, the issue of the Townsite and the conveyance of the reversionary interest appear to have been overlooked during consultation. BLM has concluded

that conveying a reversionary interest in these lands constitutes an undertaking for purposes of Section 106 of the National Historic Preservation Act and requires us to consider potential effects to historic properties at the Eagle Mountain Townsite. In addition to the Superior Court ruling, a question about the eligibility of the Eagle Mountain Mine was raised in scoping meetings for National Environmental Policy Act compliance that we felt should be addressed.

The Area of Potential Effect for this consultation includes all such patented lands that make up the Townsite of Eagle Mountain, which is approximately 429 acres. BLM also wishes to consult on the eligibility of the Eagle Mountain Mine, which was located in the Area of Potential Effect for the original undertaking, but was not evaluated.

Eagle Mountain Mine. The Eagle Mountain Mine is located on patented land and is privately owned. CH2M Hill has evaluated the National Register eligibility of the mine (see enclosed report) and has determined that the mine does not satisfy the general requirement that a property be at least fifty (50) years old or possess exceptional importance. They also determined that the property has experienced a significant loss of integrity. For that reason, they have recommended that the mine is not a historic property and is not eligible for listing on the National Register. The BLM agrees with this assessment.

Eagle Mountain Townsite. In August, 1995, Greenwood and Associates surveyed the patented lands of the Eagle Mountain Townsite for historic properties that might be affected by this project (see enclosed report). The survey identified one isolated milling stone artifact (Field No. EM-ISO#1). They have recommended that this isolate is not eligible for listing on the National Register. BLM agrees with this assessment.

Greenwood and Associates also conducted a cursory evaluation of the buildings and structures remaining at the town of Eagle Mountain. The Townsite was founded in 1949. All of the existing buildings date from the 1950s through the 1970s. Almost all of the buildings can be characterized as prefabricated or of modular construction. The Townsite is also littered with associated period construction debris and modern refuse. No archaeological remnants from the historic period were identified. As with the Eagle Mountain Mine, the Eagle Mountain Townsite does not satisfy the general requirement that a property be at least fifty years old or be of exceptional importance to be eligible for the National Register. BLM has determined that the Eagle Mountain Townsite is not a historic property and that no further evaluation is required.

In summary, BLM has determined that the Eagle Mountain Mine and Eagle Mountain Townsite do not satisfy the minimal requirements to be considered a historic property and are not eligible for listing on the National Register of Historic Places. BLM has

also determined that the isolated milling feature, designated Field No. EM-ISO#1 by the contractor, is not eligible for the National Register of Historic Places. We request your concurrence with our determinations.

If we can provide any additional information or assistance about this undertaking, please contact Rolla Queen, District Archaeologist, at (909) 697-5385, or Mike Mitchell at (619) 251-4821. Thank you for your assistance in this matter.

Sincerely,

Joel D Butz, for

Henri R. Bisson
District Manager

Enclosures

cc: Russ Kaldenberg (CA-931.4) w/attachments
Richard Waggoner (CA-064) w/attachments
Mike Mitchell (CA-066.23) w/o attachments
Joan Oxendine (CA-062) w/o attachments
Doug Romoli (CA-062) w/o attachments

STATE OF CALIFORNIA — THE RESOURCES AGENCY

PETE WILSON, Governor

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO 94296-0001
(916) 653-6624
FAX: (916) 653-9824

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	P&RR		
	L&M		
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RETURN TO:

December 12, 1996

REPLY TO: BLM910.8265

Henri R. Bisson
District Manager
Bureau of Land Management
California Desert District Office
6221 Box Springs Boulevard
RIVERSIDE CA 92507-0714

Dear Mr. Bisson:

RE: EAGLE MOUNTAIN LANDFILL PROJECT

Thank you for notifying me that the BLM is re-opening consultation on the Eagle Mountain Landfill project. Subsequent to our 1991 consultation, the San Diego Superior Court ruled that the Environmental Impact Report for the project should include the Eagle Mountain Townsite, not included in the 1991 APE, in the project description. The APE has now been expanded to include all patented lands that make up the Townsite of Eagle Mountain, approximately 429 acres. The BLM also wishes to consult now on the eligibility of the the Eagle Mountain Mine, located in the earlier APE but not evaluated.

Pursuant to the terms of the Programmatic Agreement regarding the identification, evaluation and treatment of historic properties managed by the BLM in California, you have determined that neither the Eagle Mountain Townsite nor the Eagle Mountain Mine are eligible for inclusion in the National Register of Historic Places. You have documented that both properties are less than 50 years of age and that neither property exhibits exceptional significance under National Register Criteria Exception G. You have further determined that an isolated milling stone artifact (Field No. EM-ISO#1) is not eligible for inclusion in the National Register. I concur with your determinations.

If you have questions, please do not hesitate to contact Lucinda Woodward at (916) 653-9116.

Sincerely,

Cherilyn Widell
State Historic Preservation Officer

Notification Announcement and Mailing List

1795
(CA-063.80)

JUL 03 1996

Director, Office of the Federal Register
National Archives and Records Service
General Services Administration
Washington, D.C. 20408

Dear Sir:

Enclosed are three (3) signed copies of a Notice of Availability for publication in the Federal Register. We request publication on July 12, 1996. Questions may be referred to Joan Oxendine of this office (909) 697-5365. Thank you for your assistance.

Sincerely,

HENRI R. BISSON

Henri R. Bisson
District Manager

Enclosures

4310-40-M

6-00160

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[CA-066-00-5440-00-ZBBB; CACA-30070; CACA-25594; CACA-31926]

Notice of Availability of Draft Eagle Mountain Landfill and Recycling Center Project Environmental Impact Statement/Environmental Impact Report, Riverside County, California

AGENCY: Bureau of Land Management

ACTION: Notice of Availability of the Draft Eagle Mountain Landfill and Recycling Center Project Environmental Impact Statement/Environmental Impact Report

SUMMARY: In accordance with Section 202 of the National Environmental Policy Act of 1969, a draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) has been prepared for the Eagle Mountain Landfill and Recycling Center Project by the Bureau of Land Management (BLM) and County of Riverside. The EIS/EIR describes and analyzes six alternatives in addition to the proposed project. Mine Reclamation Corporation and Kaiser Eagle Mountain, Inc. has proposed to develop the project on a portion of the Kaiser Eagle Mountain Mine in Riverside County, California. The proposed

project comprises a Class III nonhazardous municipal solid waste landfill and the renovation and repopulation of Eagle Mountain Townsite. The proposal by the proponent includes a land exchange and application for rights-of-way with the Bureau of Land Management and a Specific Plan, General Plan Amendment, Change of Zone, Development Agreement, Revised Permit to Reclamation Plan, and Tentative Tract Map with the County. The EIS/EIR analyzes the effects of the proposed action and alternatives on such environmental issues as desert tortoise, air and water quality, and wilderness. The BLM has not identified a preferred alternative in the Draft EIS/EIR; a preferred alternative will be identified in the Final EIS/EIR. Comments concerning the adequacy of this document will be considered in preparation of the Final EIS/EIR. Copies of the EIS/EIR are available for review at the following libraries:

Desert Hot Springs Public Library, 1691 West Drive, Desert Hot Springs, CA

Los Angeles Public Library, Documents Department, 433 Spring Street, Los Angeles, CA

Palo Verde Valley District Library, 125 W. Chanslor Way, Blythe, CA

San Bernardino County Library, Yucca Valley Branch, 57098 Twentynine Palms Highway, Yucca Valley, CA

University of California, Riverside Library, Government Publications, Riverside, CA

California State Library, Sacramento, CA

Indio Branch Library, 200 Civic Center Mall, Indio, CA

Palm Desert Public Library, 4480 Portola, Palm Desert, CA

Riverside Central Library, Government Documents, 381 Mission Inn Avenue, Riverside, CA

College of the Desert Library, 43-500 Monterey Avenue, Palm Desert, CA

Coachella Branch Library, Coachella, CA

Lake Tamarisk Branch Public Library, 43880 Lake Tamarisk Drive, Desert Center, CA

Palm Springs Library, 300 S. Sunrise Way, Palm Springs, CA

San Bernardino County Library, Joshua Tree Branch, 6465 Park Boulevard, Joshua Tree, CA

San Bernardino Public Library, Feldheym Central Library, W. 6 Street, San Bernardino, CA

Riverside Community College, Martin Luther King Library, 4800 Magnolia Avenue, Riverside, CA

Rancho Mirage Public Library, 42520 Bob Hope Drive, Rancho Mirage, CA

Cathedral City, 33520 Date Palm Drive, Cathedral City, CA

Copies will also be available at the following BLM and County offices:

BLM Desert District Office, 6221 Box Springs Boulevard, Riverside, CA

BLM Palm Springs-South Coast Resource Area, 63-500 Garnet, North Palm Springs, CA

County of Riverside, Planning Department, 4080 Lemon Street, 9th Floor, Riverside, CA

County of Riverside, Transportation and Land Management Agency, 46-209 Oasis Street, Room 209, Indio, CA

DATES: A sixty (60) day comment period has been established for review of the Draft EIS/EIR. Written comments on the draft EIS/EIR must be submitted or postmarked no later than September 10, 1996. Oral and/or written comments may also be presented at

four public hearings to be held:

August 5, 1996	Lake Tamarisk Clubhouse
6:00 - 9:00 p.m.	26251 Parkview
	Desert Center, CA
August 6, 1996	Palm Springs Convention Center
4:00 - 7:00 p.m.	Springs Theater
	277 N. Avenida Caballeros
	Palm Springs, CA
August 7, 1996	Black Rock Visitor Center
6:00 - 9:00 p.m.	9800 Black Rock Canyon Road
	Yucca Valley, CA
August 8, 1996	Riverside Municipal Auditorium
4:00 - 7:00 p.m.	3485 Mission Inn Avenue
	Riverside, CA

ADDRESS: Writtten comments on the document should be addressed to: Eagle Mountain Landfill and Recycling Center Project, Bureau of Land Management, 6221 Box Springs Boulevard, Riverside, California 92507.

FOR FURTHER INFORMATION CONTACT: Joan Oxendine, California Desert District, 6220 Box Springs Boulevard, California 92507; phone (909) 697-5365.

_____ _____

Henri R. Bisson Date

District Manager

PROOF OF PUBLICATION

(2010, 2015.5 CCP)

PROOF OF PUBLICATION OF

NOTIOFCOMP

EAGLE MTN.

I am a citizen of the United States. I am over the age of eighteen years and not a party to or interested in the above entitled matter. I am an authorized representative of THE PRESS-ENTERPRISE, a newspaper of general circulation, printed and published daily in the city of Riverside, County of Riverside, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of Riverside, State of California, under date of April 25, 1952, Case Number 54446, under date of March 29, 1957, Case Number 65673 and under date of August 25, 1995, Case Number 267864; that the notice, of which the annexed is a printed copy, has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to wit:

07/12/1996

I Certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated July 12, 1996
at Riverside, California

K. Peoples

PLANNING DEPT CO OF RIV

NOTICE of COMPLETION of a Draft Environmental Impact Statement/ Environmental Impact Report

A Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) for the proposed Eagle Mountain Landfill and Recycling Center (Project) has been completed, and is described as follows:

Development of a regional Class III landfill to be located on a portion of the Eagle Mountain open pit iron mine in eastern Riverside County, approximately 10 miles north of the community of Desert Center, about 200 miles east of Los Angeles, and approximately 50 miles west of the Arizona border. The Project site occupies approximately 4,654 acres, with the landfill itself covering 2,164 acres. The Project proposes to accept a maximum inflow of 20,000 tons of municipal solid waste per day from a seven county wasteshed area (Riverside, San Diego, Orange, San Bernardino, Los Angeles, Santa Barbara, and Ventura Counties). Of the total waste to be accepted, a project average of 16,000 tons per day will be shipped by rail, with the remaining 4,000 tons per day to be delivered by truck. The landfill has an anticipated lifespan of 117 years. The Project also includes the planned renovation and repopulation of the adjacent Townsite, as a result of a need to provide housing for landfill workers and their families.

Federal lands within the Project area have been selected by Kaiser Ventures, Inc. (Kaiser) to transfer ownership, in exchange for offered lands currently under ownership of Kaiser. The land exchange will be made pursuant to the Federal Land Policy and Management Act (FLPMA), Title II, Section 206. The selected lands total approximately 3,481 acres of publicly owned lands. The offered lands are generally located at certain sites along the Eagle Mountain railroad from Ferrum Junction to just north of Interstate 10. The land exchange process will also include a valuation of the reverter clause included in the deed granting ownership of the Eagle Mountain townsite to Kaiser, that would cause reversion of ownership to the Bureau of Land Management (BLM). FLPMA roads and railroad right-of-way grants are also contemplated for Eagle Mountain Road, the proposed Eagle Mountain Road extension, and the Eagle Mountain railroad.

County applications for the Project include Specific Plan No. 305, which will establish the permitted land uses, the development standards and design guidelines, as well as the regulatory and environmental performance standards for the proposed landfill; Comprehensive General Plan Amendment No. 402, which proposes to change the Open Space and Conservation Map designation for the site from "Mountain Areas," "Desert Areas," "Areas Not Designated as Open Space," and "Mineral Resources" to "Specific Plan No. 305", and the Eagle Mountain Sub-Area land use policies of the Chuckwalla Land Use Planning Area will also be revised to permit the proposed landfill and its related uses; Change of Zone No. 6249, which proposes to change the existing zoning designation of M-R-A (Mineral Resources and Related Manufacturing) to S-P (Specific Plan); Development Agreement No. 64, which proposes to establish an agreement between the County and the applicant, or their successors in interest, that would secure the right to develop the landfill in accordance with the landfill specific plan, and certain rules, policies, and ordinances in effect at the time the agreement is executed, as well as provide for certain specific public benefits, improvements and/or exactions; and Revised Permit No. 158 to Reclamation Plan No. 107, which will alter the adopted reclamation plan in favor of the proposed specific plans.

County applications for the townsite include Specific Plan No. 306, which would establish the permitted land uses, the development standards and design guidelines, as well as the regulatory and environmental performance standards for the townsite; Comprehensive General Plan Amendment No. 405 which proposes to change the Open Space and Conservation Map designation for the site from "Desert Area," and "Areas Not Designated as Open Space" to "Specific Plan No. 305"; Change of Zone No. 6253, which proposes to change the existing zoning designation of W-2 (Controlled Development), Natural Assets (N-A), General Commercial (C-1/C-P), and M-R-A (Mineral Resources and Related Manufacturing) to S-P (Specific Plan); and Tentative Tract Map No. 28217, which proposes to subdivide approximately 429 acres into a 12-lot/402 unit planned residential development.

Copies of the DEIS/DEIR are available for review at the Riverside County Planning Department Offices at 4080 Lemon Street, 9th Floor, Riverside, California 92502 and at 46-209 Oasis Street, 2nd Floor, Room 209, Indio, California 92201; and at the Bureau of Land Management Offices at 6221 Box Springs Blvd., Riverside, California 92507 and at 63-500 Garnett Avenue, North Palm Springs, California 92258

Copies of the document will also be provided to the following libraries for public review: Riverside City/County Public Library-Central Library; Lake Tamarisk Public Library; Indio Branch Library; Palm Desert Public Library; Desert Hot Springs Library; Palm Springs Library; Cathedral City Library; Rancho Mirage Library; Palo Verde Valley District Library; San Bernardino County Library (Main Branch, Joshua Tree Branch, Yucca Valley Branch); University of California, Riverside-Main Library (Thomas Rivera Library) College of the Desert Library; Riverside Community College Library; Los Angeles Public Library; California State Library (Sacramento).

Comments on the document must be submitted to the Riverside County Planning Department no later than 5:00 P.M. on September 10, 1996, to beincluded in the Final EIR, which will be presented to the Riverside County hearing bodies. Notification of the County of Riverside public hearings will be provided at a later date. Any comments or questions should be directed to David Mares - Senior Planner, Riverside County Planning Department, P.O. Box 1409, Riverside, CA 92502-1409. Telephone (909) 275-3275. 7/12

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
California Desert District Office
6221 Box Springs Boulevard
Riverside, California 92507-0714

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CACA-30070
CACA-25594
CACA-31926
(CA-063.80)

JUL 01 1996

Office of Environmental Policy and Compliance
Department of Interior, MIB-2340
1849 C Street
Washington, D.C. 20240

Dear Sir:

Enclosed are five (5) copies of a joint Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Eagle Mountain Landfill and Recycling Center Project. The EIS control number is DES 96-29. This distribution list is provided in Appendix A-5 of the document.

If there are any questions, please contact Joan Oxendine at 909 697-5365. Thank you for your assistance.

Sincerely,

Molly S. Brady

for Henri R. Bisson
District Manager

Enclosures

Eagle Mountain Landfill and Recycling Center

Environmental Impact Statement/Environmental Impact Report

Errata Sheet

Title Page, telephone number for David Mares, County of Riverside is 909/275-3275

Page 1-41, Section 1.6, end of first paragraph, Impacts that Cannot Be Mitigated. The following sentence is added: "For biological resources, the loss of the Kaiser mine adit for bat roost habitat is considered a significant impact that cannot be mitigated."

Page 2-68, Table 2-5, Comparison of Eagle Mountain, Mesquite, and Rail Cycle/Bolo Proposed Landfills and La Paz Landfill (Impacts After Mitigation. Under the "Biological Resources" row heading, the phrase "Not Significant" is replaced with "The loss of the Kaiser mine adit for bat roost habitat is a significant impact that cannot be mitigated."

Page 5-28, Table 5-6, Potential Impacts of the La Paz County Regional Landfill. The Project Status description is revised as follows:

> Environmental Documentation: Environmental Assessment
> Permits/Approvals: Environmental Assessment approved by La Paz County
> Timeframe: Expansion for 10-year capacity

CH2M HILL
3 Hutton Centre Drive
Suite 200
Santa Ana, CA
92707
Tel 714.429.2000
Fax 714.429.2050

CH2MHILL

Celebrating 50 Years

July 5, 1996

115231.T8.ZZ

Office of Environmental Policy and Compliance
Department of Interior, MIB-2340
1849 C Street
Washington, D.C 20460

Subject: Revised Errata Sheet for Eagle Mtn. Landfill EIS/EIR

Dear Sir or Madame:

Enclosed is a revised Errata Sheet for the Eagle Mountain Landfill and Recycling Center EIS/EIR (CACA 30070, CACA 25595, CACA 31926). Also enclosed is a copy of the transmittal letter that accompanied the five copies of the EIS/EIR sent to the Office of Environmental Policy and Compliance on July 3, 1996. Please discard the Errata Sheet that accompanied the transmittal of the five copies of the EIS/EIR and replace it with the enclose Errata Sheet. Please contact me at 714-429-2020, extension 2462, or Christine Roberts at extension 2401 if you have any questions about this request.

Sincerely,

CH2M HILL

Christine Roberts for

Thomas Peters/CH2M HILL
Senior Project Manager

Enclosures

cc: David Mares/County of Riverside
Molly Brady/BLM

CH2M HILL
3 Hutton Centre Drive
Suite 200
Santa Ana, CA
92707
Tel 714.429.2000
Fax 714.429.2050

CH2MHILL

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July 11, 1996

115231.T8.ZZ

Office of Federal Activities
Environmental Protection Agency
ATTN: Pearl Young, EIS Filing Section
1200 Pennsylvania Avenue
Arial Rios Building, South Oval Lobby
Washington, D.C 20040

Subject: Revised Errata Sheet (Revision 2) for Eagle Mtn. Landfill EIS/EIR

Dear Ms. Young:

This letter references the Eagle Mountain Landfill and Recycling Center EIS/EIR (CACA 30070, CACA 25595, CACA 31926). The public comment period for this document has been extended to September 17, 1996. Attached is a revised Errata Sheet noting this extension date. Please discard the revised Errata Sheet that was sent to your office on July 5, 1996, and replace it with the enclosed Errata Sheet. Please contact me at 714-429-2020, extension 2462, or Christine Roberts at extension 2401 if you have any questions about this request.

Sincerely,

CH2M HILL

Christine Roberts for

Thomas Peters/CH2M HILL
Senior Project Manager

Enclosures

cc: David Mares/County of Riverside
Molly Brady/BLM

Eagle Mountain Landfill and Recycling Center

Environmental Impact Statement/Environmental Impact Report

Errata Sheet

Title Page, telephone number for David Mares, County of Riverside is 909/275-3275; Last Date for Receipt of Written Public and Agency Comments: September 17, 1996

Page 1-41, Section 1.6, end of first paragraph, Impacts that Cannot Be Mitigated. The following sentence is added: "For biological resources, the loss of the Kaiser mine adit for bat roost habitat is considered a significant impact that cannot be mitigated."

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Permits/Approvals: Environmental Assessment approved by La Paz County
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CH2MHILL

Celebrating 50 Years

July 5, 1996

115231.T8.ZZ

State Clearinghouse
1400 Tenth Street
Sacramento CA 85814

Subject: Revised Errata Sheet for Eagle Mtn. Landfill EIS/EIR

Dear Sir or Madame:

Enclosed is a revised Errata Sheet for the Eagle Mountain Landfill and Recycling Center EIS/EIR (State Clearinghouse No. 95052023). Also enclosed is a copy of the NOC that accompanied the ten copies of the EIS/EIR sent to the State Clearinghouse on July 3, 1996. Please discard the Errata Sheet that accompanied the transmittal of the ten copies of the EIS/EIR and replace it with the enclose Errata Sheet. Please contact me at 714-429-2020, extension 2462, or Christine Roberts at extension 2401 if you have any questions about this request.

Sincerely,

CH2M HILL

Christine Roberts for

Thomas Peters/CH2M HILL
Senior Project Manager

Enclosures

cc: David Mares/County of Riverside
Molly Brady/BLM

COUNTY OF RIVERSIDE PLANNING DEPARTMENT

NOTICE OF COMPLETION

SCH No. 95052023

Project Title: Eagle Mountain Landfill and Recycling Center

Lead Agency: County of Riverside Planning Department — Contact Person: David Mares, Senior Planner

Street Address: P.O. Box 1409 — Phone: (909) 275-3275

City: Riverside — Zip: 92502-1409 — County: Riverside

Project Location

County: Riverside — City/Nearest Community: Communities of Desert Center and Lake Tamarisk — Total Acreage: 5,058

Cross Streets: Northerly terminus of Kaiser Road, North of Interstate 10.

Assessor's Parcel No.: 807-070-004 et al — Section: 1, 2, 7, 31, 35, 36 — Township: 3S, 4S — Range: 14E, 15E — Base: San Bernardino

Within 2 Miles of: State Hwy #: N/A — Waterways: MWD Colorado River Aqueduct

Airports: MWD Airstrip — Railways: Kaiser Railroad — Schools: Desert Center Unified

Document Type

CEQA: ___ NOP; ___ Supplimental/Subsequent; ___ Early Cons; ___ EIR (Prior SCH No.); ___ Neg Dec; ___ Other:; X Draft EIR

NEPA: ___ NOI; ___ EA; X Draft EIS; ___ FONSI; X Joint Document; ___ Final Document; ___ Other:

Local Action Type

___ General Plan Update; X General Plan Amendment; ___ General Plan Element; ___ Community Plan

X Specific Plan; ___ Master Plan; X Planned Unit Dev.; ___ Site Plan

X Rezone; ___ Prezone; ___ Use Permit; X Land Division

___ Annexation; ___ Redevelopment; ___ Coastal Permit; X Other: Revision to Reclamation Plan

Development Type

___ Residential:	Units 424	Acres 124.79	Employees ___	
___ Office:	Sq. Ft. ___	Acres ___	Employees ___	
X Commercial:	Sq. Ft. ___	Acres 54	Employees ___	
___ Industrial:	Sq. Ft. ___	Acres ___	Employees ___	
___ Education:				
X Recreational: Open Space	Acres 168			

___ Water Facilities: Type ___ MGD

___ Transportation: Type

___ Mining: Mineral

___ Power: Type/Watts

___ Waste Treatment: Type

___ Hazardous Waste: Type

X Other: Class III Landfill

Project Issues Discussed in Document

X Aesthetic/Visual	X Floodplain/Flooding	X Schools/Universities	X Water Quality
___ Agricultural Land	___ Forest Land/Fire Hazard	X Septic Systems	X Water Supply/Ground Water
X Air Quality	X Geologic/Seismic	X Sewer Capacity	X Wetland/Riparian
X Archaeological/Hist.	X Minerals	X Soil Erosion/Compaction Grading	X Wildlife
___ Coastal Zone	X Noise	X Solid Waste	X Growth Inducing
X Drainage/ Absorption	X Population/Housing Balance	X Toxic/Hazardous	X Land Use
X Economics/Jobs	X Public Service/Facilities	X Traffic/Circulation	X Cumulative Effects
X Fiscal	X Recreation/Parks	X Vegetation	X Other: Wilderness Experience

Present Land Use/Zoning/General Plan Use: An inoperative iron ore pit mine and related mining town/Controlled Development Areas (W-2), General Commercial (C-1/C-P), and Mineral Resources & Related Manufacturing (M-RA)/Mountainous Areas, Mineral Resources, Desert Areas, and Areas Not Designated As Open Space.

Project Description: A Specific Plan to develop a proposed regional Class III landfill with rail and highway access, and a Specific Plan to develop an existing townsite, with related General Plan Amendment, and Change of Zone applications; along with a Development Agreement, a Tentative Tract Map application, and a Revision to a Reclamation Plan.

COUNTY OF RIVERSIDE PLANNING DEPARTMENT

Reviewing Agency Checklist

KEY
S = Document sent by lead agency
X = Document sent by SCH
✓ = Suggested Distribution

RESOURCES AGENCY
___ Boating & Waterways
___ Coastal Commission
___ Coastal Conservation
___ Colorado River Board
___ Conservancy
✓ Fish & Game
___ Forestry
___ Office of Historic Preservation
___ Parks & Recreation
✓ Reclamation
___ S.F. Bay Conservation & Development Commission
✓ Water Resources (DWR)

BUSINESS, TRANSPORTATION & HOUSING
___ Aeronautics
✓ California Highway Patrol
✓ CALTRANS District No. 8
___ Dept. of Transportation Planning (Headquarters)
___ Housing & Community Development
___ Food & Agriculture

HEATH & WELFARE
___ Health Services

STATE & CONSUMER SERVICES
___ General Services
___ OLA (Schools)

Cal-EPA
✓ Air Resources Board
✓ APCD/AQMD
✓ California Waste Management Board
___ SWRCB: Clean Water Grant
___ SWRCB: Delta Unit
___ SWRCB: Water Qualities
___ SWRCB: Water Rights
✓ Regional Water Quality Control Board No. 8

YOUTH & ADULT CORRECTIONS
✓ Corrections

INDEPENDENT COMMISSIONS & OFFICES
Energy Commission
___ Native American Heritage Commission
___ Public Utilities Commission
___ Santa Monica Mountains Conservancy
___ State Lands Commission
___ Tahoe Regional Planning Agency

___ Other: _____

PUBLIC REVIEW PERIOD (to be filed in by lead agency)

Starting Date: July 12, 1996 **Ending Date:** September 10, 1996

Signature: David Mares **Date:** July 2, 1996

Lead Agency:	County of Riverside Planning Department
Consulting Firm:	CH2M Hill
Address:	3 Hutton Centre Drive, Suite 200
City/State/Zip:	Santa Ana, CA 92707
Contact:	Thomas Peters, AICP
Phone:	(714) 429-2020 Ext. 2462

For SCH Use Only:
Date received at SCH:
Date review starts:
Date to agencies:
Date to SCH:
Clearance Date:
Notes:

Applicants:	Mine Reclamation Corporation	Kaiser Ventures Inc.
Address:	43-645 Monterey Avenue, Suite A	3633 E. Inland Empire Blvd.
City/State/Zip:	Palm Desert, CA 92260	Ontario, CA 91764
Phone:	(619) 779-5888	(909) 483-8500

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814

C:\FILES\WP\SP.TM\SP305\CEQA\NOC\NOC1.WPD

07.02.1996 11:06 NO. 3 P. 3
FROM RIV CNTY PLANNING DEPT.

Eagle Mountain Landfill and Recycling Center

Environmental Impact Statement/Environmental Impact Report

Errata Sheet

Title Page, telephone number for David Mares, County of Riverside is 909/275-3275

Page 1-41, Section 1.6, end of first paragraph, Impacts that Cannot Be Mitigated. The following sentence is added: "For biological resources, the loss of the Kaiser mine adit for bat roost habitat is considered a significant impact that cannot be mitigated."

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Page 5-28, Table 5-6, Potential Impacts of the La Paz County Regional Landfill. The Project Status description is revised as follows:

Environmental Documentation: Environmental Assessment
Permits/Approvals: Environmental Assessment approved by La Paz County
Timeframe: Expansion for 10-year capacity

COUNTY OF RIVERSIDE PLANNING DEPARTMENT

NOTICE OF COMPLETION

SCH No. 95052023

Project Title: Eagle Mountain Landfill and Recycling Center

Lead Agency: County of Riverside Planning Department | Contact Person: David Mares, Senior Planner

Street Address: P.O. Box 1409 | Phone: (909) 275-3275

City: Riverside | Zip: 92502-1409 | County: Riverside

Project Location

County: Riverside | City/Nearest Community: Communities of Desert Center and Lake Tamarisk

Cross Streets: Northerly terminus of Kaiser Road, North of Interstate 10. | Total Acreage: 5,058

Assessor's Parcel No.: 807-070-004 et al | Section: 1, 2, 7, 31, 35, 36 | Township 3S, 4S | Range: 14E, 15E | Base: San Bernardino

Within 2 Miles of: State Hwy #: N/A | Waterways: MWD Colorado River Aqueduct

Airports: MWD Airstrip | Railways: Kaiser Railroad | Schools: Desert Center Unified

Document Type

CEQA:		NEPA:	
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___	Early Cons	___	EIR (Prior SCH No.)
___	Neg Dec	___	Other:
X	Draft EIR		

NEPA:		
___	NOI	X Joint Document
___	EA	___ Final Document
X	Draft EIS	___ Other:
___	FONSI	

Local Action Type

___ General Plan Update	X Specific Plan	X Rezone	___ Annexation
X General Plan Amendment	___ Master Plan	___ Prezone	___ Redevelopment
___ General Plan Element	X Planned Unit Dev.	___ Use Permit	___ Coastal Permit
___ Community Plan	___ Site Plan	X Land Division	X Other: Revision to Reclamation Plan

Development Type

X Residential:	*Units* 424	*Acres* 124.79	*Employees* ___	___ Water Facilities: *Type*	*MGD*
___ Office:	*Sq. Ft.* ___	*Acres* ___	*Employees* ___	___ Transportation: *Type*	
X Commercial:	*Sq. Ft.* ___	*Acres* 54	*Employees* ___	___ Mining: *Mineral*	
___ Industrial:	*Sq. Ft.* ___	*Acres* ___	*Employees* ___	___ Power: *Type/Watts*	
___ Education:				___ Waste Treatment: *Type*	
X Recreational: Open Space	Acres 168			___ Hazardous Waste: *Type*	
				X Other: Class III Landfill	

Project Issues Discussed in Document

X Aesthetic/Visual	X Floodplain/Flooding	X Schools/Universities	X Water Quality
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07.02.1996 11:05 NO. 3 P. 2
FROM RIV CNTY PLANNING DEPT.

COUNTY OF RIVERSIDE PLANNING DEPARTMENT

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___ Dept. of Transportation Planning (Headquarters)
___ Housing & Community Development
___ Food & Agriculture

HEATH & WELFARE
___ Health Services

STATE & CONSUMER SERVICES
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___ OLA (Schools)

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YOUTH & ADULT CORRECTIONS
✓ Corrections

INDEPENDENT COMMISSIONS & OFFICES
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___ Native American Heritage Commission
___ Public Utilities Commission
___ Santa Monica Mountains Conservancy
___ State Lands Commission
___ Tahoe Regional Planning Agency

___ Other: _____

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Starting Date: July 12, 1996 **Ending Date:** September 10, 1996

Signature: David Mares **Date:** July 2, 1996

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City/State/Zip:	Santa Ana, CA 92707
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For SCH Use Only:
Date received at SCH:
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Applicants:	Mine Reclamation Corporation	Kaiser Ventures Inc.
Address:	43-645 Monterey Avenue, Suite A	3633 E. Inland Empire Blvd.
City/State/Zip:	Palm Desert, CA 92260	Ontario, CA 91764
Phone:	(619) 779-5888	(909) 483-8500

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814

C:\FILES\WP\SP.TM\SP305\CEQA\NOC\NOC1.WPD

FROM RIV CNTY PLANNING DEPT. 07.02.1996 11:06 NO. 3 P. 3

CH2M HILL
3 Hutton Centre Drive
Suite 200
Santa Ana, CA
92707
Tel 714.429.2000
Fax 714.429.2050

CH2MHILL

Celebrating 50 Years

July 11, 1996

115231.T8.ZZ

State Clearinghouse
1400 Tenth Street
Sacramento CA 85814

Subject: Revised Errata Sheet (No. 2) for Eagle Mtn. Landfill EIS/EIR

Dear Sir or Madame:

This letter references the Eagle Mountain Landfill and Recycling Center EIS/EIR (State Clearinghouse No. 95052023). The public comment period for this document has been extended to September 17, 1996. Attached is a revised Errata Sheet noting this extension date. Please discard the revised Errata Sheet that was sent to your office on July 5, 1996 and replace it with the enclosed Errata Sheet. Please contact me at 714-429-2020, extension 2462, or Christine Roberts at extension 2401 if you have any questions about this request.

Sincerely,

CH2M HILL

Christine Roberts for

Thomas Peters/CH2M HILL
Senior Project Manager

Enclosures

cc: David Mares/County of Riverside
Molly Brady/BLM

Eagle Mountain Landfill and Recycling Center

Environmental Impact Statement/Environmental Impact Report

Errata Sheet

Title Page, telephone number for David Mares, County of Riverside is 909/275-3275; Last Date for Receipt of Written Public and Agency Comments: September 17, 1996

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
California Desert District Office
6221 Box Springs Boulevard
Riverside, California 92507-0714

CACA-30070
CACA-25594
CACA-31926
CA063.80
JUL 2 3 1996

Dear Reader:

Recently, you have received a copy of the Draft Environmental Statement and Environmental Impact Report (EIS/EIR) for the proposed Eagle Mountain Landfill and Recycling Center Project. This letter is to inform you that written comments to this document will be accepted through September 17, 1996, instead of through September 10, 1996, as stated in the "Dear Reader" letter, in the draft EIS/EIR.

Sincerely,

Alan Stein ACTING

Henri R. Bisson
District Manager

COUNTY OF RIVERSIDE

TRANSPORTATION AND
LAND MANAGEMENT AGENCY

Planning Department

Richard K. Lashbrook
Agency Director

Aleta J. Laurence
Director of Planning

July 8, 1996

Dear Reference Librarians:

Attached is the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Eagle Mountain Landfill and Recycling Center Project, including Volumes 1 and 2 of the Technical Appendices. Please make this document available to the public in the reference/government publications section of your library.

We will also be sending a copy of the Final EIS/EIR to your library when that document is completed. Because the Draft EIS/EIR and the Final EIS/EIR are stand-alone documents, we request that you retain the Draft EIS/EIR in your library after receipt of the Final EIS/EIR. If you have any questions about this request, please contact:

David Mares
County of Riverside
County Administrative Center
4080 Lemon Street, 9th Floor
P.O. Box 1409
Riverside California 92502-1409
909-275-3275

COUNTY OF RIVERSIDE

TRANSPORTATION AND
LAND MANAGEMENT AGENCY

Planning Department

Richard K. Lashbrook
Agency Director

Aleta J. Laurence
Director of Planning

July 8, 1996

Dear Interested Citizen:

A Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Eagle Mountain Landfill and Recycling Center Project has been prepared and is available for public review. This Draft EIS/EIR provides the most current information on potential environmental impacts of the proposed project.

Copies of the EIS/EIR are available for review at the following locations:

LIBRARIES:

California State Library (Sacramento)
Desert Hot Springs Library
Indio Branch Library
Palm Desert Public Library
Riverside Central Library
San Bernardino County Library
(Joshua Tree Branch, Yucca Valley Branch)
College of the Desert Library
Coachella Branch Library
San Bernardino Public Library
Palm Springs Library
Los Angeles Public Library
Palo Verde Valley District Library
U.C. Riverside Library
Riverside Community College Library
Lake Tamarisk Public Library
Cathedral City Library
Rancho Mirage Library

COUNTY OF RIVERSIDE PLANNING DEPARTMENTS:

Riverside Office, 4080 Lemon St., 9th Floor, Riverside, CA 92502
Indio Office, 46-209 Oasis St., Room 209, Indio CA 92201

BUREAU OF LAND MANAGEMENT OFFICES:

Riverside Office, 6221 Box Springs Blvd., Riverside, CA 92507
Palm Springs Office, 63-500 Garnet Ave., North Palm Springs, CA 92258

If you would like more information about the Draft EIS/EIR, please contact:

David Mares, County of Riverside, County Administrative Center, 4080 Lemon St., 9th Floor, Riverside, CA 92502-1409. Telephone 909/275-3275

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Abubo	Mr. Melchor			30-886 Roseview Lane	Thousand Palms, CA 92276
Ackert	Ron Ackert			P.O. Box 3251	North Shore, CA 92254-0986
Acuna, Jr.	Mr. Joey			52-280 Calle Camacho	Coachella, CA 92236
Adams	Mr. B.			P.O. Box 127	Cathedral City, CA 92235
Adams	Ms. Hallie McG.			81-649 Shadow Avenue	Indio, CA 92201
Ahee	Carl & Lorraine			22853 B Nadine Ct	Torrance, CA 90505
Aiken	Patti & Tom	# 6 Stubblefield Drive		P.O. Box 375	Desert Center, CA 92239
Allen	Helen			PO Box 31	Desert Center, CA 92239
Allen	Mr. & Mrs. Hugh			18-853 Killoch Way	Northridge, CA 91326
Altman	Ms. Irene			475 Valmonte Sur	Palm Springs, CA 92262
Alvarez	Mr. Pedro G.			83-462 Emerald Street	Indio, CA 92201
Amacher	Robert			44101 Crystal Way	Desert Center, CA 92239
Amesbury	Mr. Bruce H.			7105 Sultana Avenue	San Gabriel, CA 91775
Amy	John Amy			P.O. Box 1208	Indio, CA 92202
Anderson	Colleen			1251 W. Edgehill Drive	San Bernardino, CA 92405
Anderson	Jim			6452 Olive Street	San Bernardino, CA 92407
Anderson	Mr. Michael			899 Gran Via Valmonte	Palm Springs, CA 92262
Anderson	Robert & Ruth			P.O. Box 495	Desert Center, CA 92239-0495
Anderson	Timmothy W.			P.O. Box 497	Desert Center, CA 92239
Araiza	Ms. Michelle			13-555 Via Real	Desert Hot Springs, CA 92240
Aron	Mr. & Mrs. Norman			270 Running Spring	Palm Desert, CA 92260
Asler	Mr. Ben			76-592 Hollyhock	Palm Desert, CA 92660
Athey	Mr. Harold			76-126 Imations Circle	Palm Desert, CA 92660
Ayotte	Ms. Donna			40-200 Sagewood Drive	Palm Desert, CA 92260
Bacca	Ms. Agnes			83-048 Lupine	Indio, CA 92201
Bacigalupo	Mark & Paz			PO Box 264	Desert Center, CA 92239
Bacon	Ms. Nancy H.			1990 Centro West	Tiburon, CA 94920
Badgley	Mrs. Marjorie			76-736 Chrysanthemum Way	Palm Desert, CA 92260
Bailey	Amber L.			450 C Golden Springs Rd.	Diamond Bar, CA 91765
Baker	Mr. George			P.O. Box 37	La Quinta, CA 92253
Baker	Ms. Gail			12182 12th Street	Yucaipa, CA 92399
Baker	Ms. Kristy G.			P.O. Box 37	La Quinta, CA 92253
Baker	Roger			Land Yacht Harbor #85	Desert Center, CA 92239
Baker	Shawn & Ruth			PO Box 584	Desert Center, CA 92239
Balin	Mr. & Mrs. Nathan			38-604 Wisteria Drive	Palm Desert, CA 92660
Bancroft	Mr. Vic			38-780 Desert Greens Drive, W.	Palm Desert, CA 92260
Bancroft	Ms. Helen P.			38-780 Desert Greens Drive, W.	Palm Desert, CA 92260
Banez	Ms. Joanne C. J.			81-375 Green Avenue	Indio, CA 92201
Barlow	Ken & Thelma			PO Box 602	Desert Center, CA 92239
Barshop	Ms. Ruthann			P.O. Box 606	Palm Desert, CA 92261-0606
Baumann	Ms. Gail			55-073 Pueblo, Apt. 1	Yucca Valley, CA 92284
Bayer	Ms. Carol			700 Camino Norte	Palm Springs, CA 92262
Beers	John C.			240 S. Anza St., Apt P	El Cajon, CA 92020
Beidler	Ms. Marilyn			P.O. Box 304	La Quinta, CA 92253

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Bell	Ms. Jane L.			338-1/2 N. 5th Street	Blythe, CA 92225
Bellamy	John & Betty			Land Yacht Harbor #129	Desert Center, CA 92239
Bellamy	John & Betty			PO Box 932	Qualicum Beach, CANADA VOR2TO
Bellomo	Mr. Angelo J.			652 Windswept	Slml Valley, CA 93065
Benner	Betty			#80 Stubblefield Drive	Desert Center, CA 92239
Bennett	Ms. Deborah M.			26-410 Ironwood	Ironwod, CA 92555
Berger	Ms. Helene			40-333 Sagewood Drive	Palm Desert, Ca 92260
Berman	Mrs. Helen E.			3 Deerfield Court	Rancho Mirage, CA 92270
Bixen	Ms. Mary			76-661 Daffodil Drive	Palm Desert, CA 92260
Blackford	George			PO Box 347	Desert Center, CA 92239
Blackstone	George & Janice			83-935 Hopl Avenue	Indio, CA 92201
Blanton	Ms. Dorothy J.			34-604 Stage Drive	Thousand Palms, CA 92276
Blinzler	F. L.			P.O. Box 532	Desert Center, CA 92239
Bliss	Ms. Catherine & Liz			43-376 Cook Street, #127	Palm Desert, CA 92260
Boehm	Henry			PO Box 1229	Yucaipa, CA 92399
Boggs	Gilmer G.			2855 Carlsbad Blvd	Carlsbad, CA 92008
Borquez	John & Kristen			PO Box 107	Desert Center, CA 92239
Borunda	George & Ann			826 Palo Verde	Desert Center, CA 92239
Bostwik	J.			217 A Pennsylvania Ave.	Glendora, CA 91740
Boyd	Charles G.			7548 Lakeside Drive	Riverside, CA 92509
Boyd	Mr. Frank			32-276 Zinnia lane	Palm Desert, CA 92660
Boylan	Glen E. and Shirley			P.O. Box 107	Desert Center, CA 92239
Branson	Darrell & Dianne			PO Box 107	Desert Center, CA 92239
Brees	Maxine			PO Box 523	Desert Center, CA 92239
Bridges	Ms. Catherine D.			163 Madrid Avenue	Palm Street, CA 92260
Broder	Ms. Ilene			76-594 Rudy Court	Palm Desert, Ca 92260
Brooks	Rodney & Patsy			925 Verbena	Desert Center, CA 92239
Brown	Margaret			PO Box 153	Desert Center, CA 92239
Brunstad	Olaf			P.O. Box 364	Desert Center, CA 92239
Brunton	George & Irene			PO Box 485	Desert Center, CA 92239
Brunton	Jim & Jery			PO Box 475	Desert Center, CA 92239
Brush	Noel & Jean			PO Box 456	Desert Center, CA 92239
Bryan	Mr. & Mrs. Rod			76-464 Violet Circle	Palm Desert, CA 92260
Bryant	Gary			PO Box 167	Desert Center, CA 92239
Buchannan	Ms. Mary J.			54-349 Inverness	La Quinta, CA 92253
Burbidge	Gene			General Delivery	Desert Center, CA 92239
Burdick	LeRoy & Ruth			PO Box 513	Desert Center, CA 92239
Burg	Mr. Carolyn			677 N. Calle Rolph	Palm Springs, CA 92262
Calderon	Anastacio Calderon			P.O. Box 423	Desert Center, CA 92239
Calderon	Ms. Eva			P.O. Box 263	Cathedral City, CA 92235
Campbell	Fred & Wanda			PO Box 143	Desert Center, CA 92239
Cannala	Ann Marie			PO Box 516	Desert Center, CA 92239-0516
Cannata	Louis			25550 Kalser Road	Desert Center, CA 92239
Canton	Mr. Carlos A.			P.O. Box 1396	Palm Springs, CA 92263

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Cantu	Saul & Ismael			P.O. Box 548	Desert Center, CA 92239
Capp	Gladys Capp			P.O. Box 206	Desert Center, CA 92239
Capp	James & June			P.O. Box 343	Desert Center, CA 92239
Carl	James & Betty			3085 17Th St	Sacramanto, CA 95818
Carlson	Mr. Dean			38-750 Paradise Way	Cathedral City, CA 92234
Carlson	Mr. Paul			7341 Ronnie Lane	Loomis, CA 95650
Carmichael	S. Carmichael			2419 Lanterman Ter.	Los Angeles, CA 90039
Camata	Ann Marie			P.O. Box 516	Desert Center, CA 92239
Carney	Chev & Clarissa			P.O. Box 411	Desert Center, CA 92239
Carter	Mr. Nick V.R.			35-523 Canteen	Thousand Palms, CA 92276
Castillo	Ms. Vicky Lynn			11-880 Arliss Drive	Grand Terrace, CA 92324
Castor	Jerry & Peggy			PO Box 502	Desert Center, CA 92239
Castor	Laura			PO Box 563	Desert Center, CA 92239
Cater	Mr. Diana			77-760 Michigan Drive, G1	Palm Desert, Ca 92260
Caygill	Ms. Jennifer			53-060 Obregon	La Quinta, CA 92253
Ceasar	Ms. Darelyn			53-595 Juarez Avenue	La Quinta, CA 92253
Chase	Mr. Lawrence			45-195 Tomlin Way	Indio, CA 92201
Chiriaco	JR			#One Chiriaco Road	Chiriaco Summit, CA 92201
Clair	Mr. Thomas St.			73-251 Joshua Tree	Palm Desert, CA 92260
Clark	Ms. Linda			51-735 Ave Diaz	La Quinta, CA 92253
Claypool	Henry & Katie			130 Hilfiker Dr	Arcata, CA 95521
Claypool	Henry & Katie			LYH #64	Desert Center, CA 92239
Clute	Mr. Steve	Desert Protection Fund		73790 El Paseo, Suite B-200	Palm Desert, CA 92260
Coe	Bill & Emma			LYH #47	Desert Center, CA 92239
Colburn	Mr. Kevin			74-066 Catalina Way	Palm Desert, CA 92260
Comer	Joe			43641 Tamarisk	Desert Center, CA 92239
Comer	Joe & Mary			PO Box 165	Desert Center, CA 92239
Conrad	Mr. Marcus			P. O. Box 1342	Palm Desert, CA 92261
Conyer	Chris & Debi			PO Box 107	Desert Center, CA 92239
Cook	Estelle & Roy			Land Yacht Harbor #12	Desert Center, CA 92239
Coon	Mr. Johnny			Box 436	Desert Center, CA 92239
Cooper	Ms. DeAnna L.			81-620 Shadow Avenue	Indio, CA 92201
Costello	Ms. Amy			P.O. Box 1018	Cabazon, CA 92230
Cothron	Mrs. Esther R.			82-099 Sunset Court	Indio, CA 92201
Coundures	John M.			2364 Indiana Ave.	Perris, CA 92370
Crane	Jacqueline			PO Box 474	Desert Center, CA 92239
Crane	Mr. D.			3400 Tahquitz-Cyn, Suite 207	Palm Springs, CA 92262
Crawford	Mrs. Pat			76-275 Dahcia	Palm Desert, CA 92260
Crooks	Ms. Mary			P.O. box 97982	Las Vegas, NV 89193
Crowder	Ms. Ledesa L.			71-760 San Jacinto Drive, #204	Rancho Mirage, CA 92270
Crowell	Ms. Jerrie I.			68-295 Verano Road	Cathedral City, CA 92234
Cruz	Ms. Nancy			40-692 Thunderbird Road	Rancho Mirage, CA 92270
Cuddell	Mr. Todd			43-541 Old Harbor Drive	Indio, CA 92201
Curtis	Howard & Helen			43551 Ragsdale Road	Desert Center, CA 92239

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Dalipagic	Ms. Dina			43-135 Washington St., #39	Palm Desert, CA 92260
Dash	Ms. Ruth E.			P.O. Box 4491	Palm Springs, CA 92263
Davis	Dr. E. R. & Sylvia			42-705 Warner Trail	Palm Desert, CA 92260
Davis	Mr. Dan L.			29 Cueta Drive	Rancho Mirage, CA 92270
Davis	Ms. Dani			P.O. Box 1339	Palm Springs, CA 92263
DeFrancesco	Mr. & Mrs. Joseph			54-185 Ave Madero	La Quinta, CA 92253
Decamp	Gordon & Ruth			933 Diamond Street #14	San Diego, Ca 92109
Delano	Ms. Kim			P.O. Box 567	Blythe, CA 92226
Delgado	Ms. Sharon			71-381 Biskra	Rancho Mirage, CA 92270
Deniz	Juan & Romana			PO Box 406	Desert Center, CA 92239
Diaz	Mr. Tony			46-883 Lilac Court	Indio, CA 92201
Diaz	Ms. Penelope			83-175 Rue Paray	Thermal, CA 92274
Dickson	Wanahda & Louis			4976 Bermuda Dunes	Banning, CA 92220
Dobbs	Frank E.			P.O. Box 323	Desert Center, CA 92239
Donahue	Timothy			15 Barroilhet Ave	San Mateo, CA 94401
Dornan	Robert	U.S. Member, House of Representatives	Attn: Patricia Fanelli	300 Plaza Alicante, Suite 360	Garden Grove, CA 92640
Dougherty	Mr. Michael A.			40-870 Centennial Circle	Palm Desert, CA 92260
Douglass	Ms. Diane			1168 Edgar	Beaumont, CA 92223
Dow	Mr. Kenneth R.			31-215 Whispering Palms Trail	Cathedral City, CA 92234
Down	Ms. Sharon			68-555 Iroquois Street	Cathedral City, CA 92234
Druett	Fred & Eloise			PO Box 7074	Desert Center, CA 92239
Dukic	Ms. Juli			136 Vista Paseo	Palm Desert, CA 92260
Duncan	Vi			PO Box 467	Desert Center, CA 92239-0467
Durham	Mr. & Mrs. Scott			68-138 Verano Road	Cathedral City, CA 92234
Elam	Ms. Clay			77-552 Mountain View	Palm Desert, CA 92260
Engelskirchen	Ms. Alice			P.O. Box 397	Tentynine, Palms, CA 92227
Engle	Claud			26250 Parkview Dr. #85	Desert Center, CA 92239
Erickson	Bob & Beth			Land Yacht Harbor#19 PO BOX24	Desert Center, CA 92239
Eslinger	Mr. B. A.			27-141 Holland Road	Sun City, CA 92584-9701
Essen	Echo			LYH #106	Desert Center, CA 92239
Evans	William			PO Box 726	Desert Center, CA 92239-0726
Evaro	Ms. Melissa			33-141 Cathedral Canyon, #A	Cathedral City, CA 92234
Farinha	Earnest & Dorothy			400 Sunrise Ave	Crescent City, CA 95531
Farr	Sam	U.S. Member, House of Representatives			
Faught	Mr. William			81-562 Encina Court	Indio, CA 92202
Faulconer	Eldon & Lorna			PO Box 576	Desert Center, CA 92239
Feldstein	Mr. Phillip			38-668 Lobelia Circle	Palm Desert, CA 92660
Feldstein	Ms. Jennifer			72-680 Sundown Lane	Palm Desert, CA 92260
Fife	Donald			P.O. Box 1054	Tustin, CA 92681
Fike	Chris & Sheila			1112 Cottonwood	Desert Center, CA 92239
Fitzpatrick	Ms. Joyce			73-450 Country Club Drive,#160	Palm Desert, CA 92260
Fjeseth	Palmer & Alberta			LYH #42	Desert Center, CA 92239
Fledderjohn	Dean & Sue			835 E. Ave., Apt E	Coronado, CA 92118
Fleischer	Mr. Stanley E.			810 Roje Avenue	Palm Springs, CA 92262

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Flis	Mr. Henry G.			73-290 San Carlos Drive	Thousand Palms, CA 92276
Foreman	Lloyd			RR1 Box 98F	Desert Center, CA 92239
Fowler	Mr. Todd R.			35-091 Vaquero Road	Cathedral City, CA 92234
Frye	Mr. Robert E.			9475 Craver Road	Morongo Valley, CA 92256
Fults	Lois & Jon			3914 Mistral Drive	Huntington Beach, CA 92649
Gacek	Ted & Mary			Land Yacht Harbor #111	Desert Center, CA 92239
Galli	Ms. Sylvia			73-290 San Carlos Drive	Thousand Palms, CA 92276
Galloway	Jack & Kate			LYH #103	Desert Center, CA 92239
Gammon	Mr. Stacy			78-650 Ave 42, #1806	Bermuda Dunes, CA 92201
Garcia	Mr. Herminia M.			P.O. Box 993	Indio, CA 92202-0993
Garrity	Ms. Grentchen			32-275 Aurora Vista, #2	Cathedral City, CA 92234
Garside	Greg & Nancy			26730 Greenvale Way	Desert Center, CA 92239
Garza	Ms. Consuelo			83-657 Mesquite Avenue	Indio, CA 92201
Gattinella	Ms. Raquel			909 Anza	Palm Springs, CA 92264
Gavaldon	Frank			PO Box 428	Desert Center, CA 92239
Geaslin	Marian			PO Box 547	Desert Center, CA 92239
Gettle	Howard & Doris			911 Edna Court	Rohnert Park, CA 94928
Gierman	Roberta			43551 Ragsdale Rd	Desert Center, CA 92239
Giles	Ted Giles			P.O. Box 511	Desert Center, CA 92239
Gilstrap	Mr. Matt			31-070 Ave Alvera	Cathedral City, CA 92234
Gilstrap	Ms. Linda R.			P.O. Box 537	Cathedral City, CA 92264
Giorvac	Jim & June			PO Box 125	Desert Center, CA 92239
Giorvas	Jim & June			Land Yacht Harbor #102	Desert Center, CA 92239
Glenn	Mr. & Mrs. Ed			38-071 Crocus Lane	Palm Desert, CA 92660
Gneri	Ms. Rowena			206 Sunnslope Avenue	Petaluma, CA 94952
Godsey	Annie			PO Box 595	Desert Center, CA 92239
Godsey	Larry & Mayrose			PO Box 646	Desert Center, CA 92239
Goretz	Mr. Benjamin			104 Sarona Circle	Palm Desert, CA 92260
Goza	Ms. Elizabeth S.			P.O. Box 713	Yucca Valley, CA 92286
Graf	Mr. Chris			51-965 Ave Mendoza	La Quinta, CA 92253
Gratham	Mr. Mike			1129 Juniper Drive	Morongo Valley, CA 92256
Gray	Duane			1851 Glenwood	El Centro, CA 92243
Green	Eric & Hazel			PO Box 112	Desert Center, CA 92239
Green	Matt & Cynthia			PO Box 305	Desert Center, CA 92239-0305
Green	Mr. John			72-564 Edgehill, Apt 3	Palm Desert, CA 92260
Green	Walter & Naryel			PO Box 306	Desert Center, CA 92239
Greene	Mrs. Bobbie			29-800 Ave La Vesta	Cathedral City, CA 92234
Greer	Milt & Lee			9700 Upper Valley Rd	Auburn, CA 95602-9264
Griffin	Mr. & Mrs. Fred Gri			17840 Rivera Drive	Blythe, CA 92226
Griffith	Don & Noemi			43981 Shadow Way	Desert Center, CA 92239
Grinde	Ms. Claire A.			55-117 Inverness	La Quinta, CA 92253
Gustafson	Joe Bill			PO Box 107	Desert Center, CA 92239
Guy	Don & Marge			PO Box 1296	Rancho Mirage, CA 92270
Haedtke	Donn & Kathy			PO Box 107	Desert Center, CA 92239

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Hahn	Kraig			P.O. Box 2941	Capistrano Beach, CA 92624
Hahn	Ms. Helen			215 LaVerne Way	Palm Springs, CA 92264
Hallowell	Kimberly Perry			1617 Forrest Knoll	Ridgecrest, CA 93555
Hamby	Coy & Pauline			PO Box 146	Desert Center, CA 92239
Hamby	Jimmy & Connie			PO Box 145	Desert Center, CA 92239
Hammontree	Mr. James W.			72-406 Sunnyvale Drive	Twentynine Palms, CA 92277
Hanaver	Ms. Roberta			75-710 Altamira	Indian Wells, CA 92210
Hancock	Ms. Theresa N.			76-804 Castle Court	Palm Desert, CA 92260
Harley	Anita			937 Verbena	Desert Center, CA 92239
Harlow	Janet			P.O. Box 401	Desert Center, CA 92239
Harrison	Edwin S.			3578 Hacienda Road	Cottonwood, CA 96022
Hart	Ms. Kim			490 Via Ensenada Circle	Palm Springs, CA 92264
Harte	Dorothy			P.O. Box 2628	Palm Springs, CA 92263
Haywood	Mr. E.			438 Sandelwood	Calimesa, CA 92320
Herman	Mr. & Mrs. Gary			76-519 Sweet Pea Way	Palm Desert, CA 92260
Hernandez	Mr. Elliot V.			53-680 Ave Cortez	La Quinta, CA 92253
Herold	Mr. Bill			830 Cleveland Road	Glendale, CA 91202
Herrera	John & Brix			PO Box 524	Desert Center, CA 92239
Herrera	Mildred			44291 Shasta Drive	Desert Center, CA 92239
Herschleb	Mr. Sydney & Fred			74-291 Gary Avenue	Palm Desert, CA 92260
Hessling	Don & Audrey			44141 Shadow Way	Desert Center, CA 92239
Hilton	Mr. Richard			68-055 Club Circle Drive	Desert Hot Springs, CA 92240
Hinderlich	Mrs. Margaret M.			16-220 Janine Drive	Whittier, CA 90603
Hockenberry	Mr. R. J.			2583 N. Palm Canyon Drive	Palm Springs, CA 92262
Holland	Ms. Tanya			525 Avenida Cerca	Palm Springs, CA 92262
Holmes	Dick An Doris			43551 Ragsdale	Desert Center, CA 92239
Hoover	Frank			1822 Miramar St.	Pomona, CA 91767
Hopkins	Walter & Verda			P.O. Box 247	Desert Center, CA 92239-0247
Hopper	Brittney			11550 E. Palm Canyon, #76	Palm Springs, CA 92264
Hornberg	Ken & Louise			PO Drawer 219	Desert Center, CA 92239
Hornick	Ms. Deborah			40281 Sagewood	Palm Desert, CA 92260
Horning	Mr. James L.			44-250 Shasta Drive	Desert Center, CA 92239
Hoskin	Laurene			277 Ave Andorra	Cathedral City, CA 92234
Hoskin	Mr. & Mrs. Ron			624 Ocotillo	Palm Springs, CA 92262
Hosowitz	Joseph L.			70-785 Ironwood Drive	Rancho Mirage, CA 92270
Howard	Don & Beverly			PO Box 69	Crescent Hills, CA 95934
Howarth	Ms. Delores L.			250 Calle Del Verano	Palm Desert, CA 92260
Hoyt	Mr. & Mrs. Peter			76-630 Begonia Lane	Palm Desert, CA 92260
Hughes	Mr. Jesse			43-632 Buena Circle	Palm Desert, CA 92260
Hunter	Mr. Dennis			4952 Ettman Drive	Mra Loma, CA 91752
Huravitch	James & Sarah			26800 Fairway Drive	Desert Center, Ca 92239
Hussain	Mr. Zahid			77-594 Missouri Drive	Palm Desert, Ca 92260
Irwin	Dollie Irwin			420 N. Morongo	Banning, CA 92220
Jablow	Ms. Grace			1340 Primavera Drive	Palm Springs, CA 92264

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Jacobson	Jack & Ruth			Land Yacht Harbor #46	Desert Center, CA 92239
Jacobson	Mr. Jeff L.			DCO 30 LAI	Twentynine Palms, CA 92278
Jacobson	Ms. Marilyn			6 Lake Shore Drive	Rancho Mirage, CA 92270
Jagodzinski	Mr. Dale			38-850 Bel Air Drive	Cathedral City, CA 92234
Jakobsen	Ms. Lisa			1944 Grand Bahama Drive	Palm Springs, CA 92264
James	Deb James			P.O. Box 168	Desert Center, CA 92239
Janios	Ms. Mary			P.O. Box 349	Morongo Valley, CA 92256
Jaramillo	Lloyd & Joyce			P.O. Box 105	Desert Center, CA 92239-0105
Jeffrey	Robert			Kaiser Eagle Mountain,PO Box37	Desert Center, CA 92239
Jenkins	Mr. Steve			47-395 Monroe Street, #109	Indio, CA 92201
Jenkins	Ms. Carolyn			45-690 Capistrano	Indio, CA 92201
Jenkins	Ms. D. L.			45-707 Deep Canyon Road	Palm Desert, CA 92260
Jent	Mr. & Mrs. Jent			P.O. Box 512	Desert Center, CA 92239
Jent-Pickel	Arnold & Mary			PO Box 512	Desert Center, CA 92239
Jessie, Jr.	Mr. Tyree			72-673 Raven Road, #4	Palm Desert, CA 92260
Johnson	Carl			7562 Regency Dr.	Palm Springs, CA 92264
Johnson	Duane & Carol			P.O. Box 99	Desert Center, CA 92239
Johnson	James & Pearl			PO Box 633	Applegate, CA 95703
Johnson	Jim & Pearl			Land Yacht Harbor #69	Desert Center, CA 92239
Johnson	Mrs. Dorothy D.			43-660 Skyward Way	La Quinta, CA 92253
Johnson	Ms. Edie			P.O. box 583	Weimar, CA 95736
Johnson	Ms. Sara A.			54-325 Ave Obregon	La Quinta, CA 92253
Johnson	Steve	The Nature Conservancy		785 Market St., 3rd Floor	San Francisco, CA 94103
Jones	Clyde & Joyce			PO Box 365	Desert Center, CA 92239
Jones	Milton			303 N. Indian Ave.	Palm Springs, CA 92262
Jones	Mr. & Mrs. Howard			P.O. Box 173	Thousand Palms, CA 92276
Jones	Mrs. H. Lynn			68-265 Santelino	Cathedral City, CA 92234
Jones	Steve			P.O. Box 246	Desert Center, CA 92239
Jones	Steve & Vickie			PO Box 246	Desert Center, CA 92239
Jordan	Richard			32-775 Flagstaff Ave.	Thousand Palms, CA 92276
Kahler	Ms. Rhonda			72-765 Beavertail Street	Palm Desert, CA 92260
Kaplan	Mr. & Mrs. Howard			38-649 Palm Valley Drive	Palm Desert, CA 92660
Kaplan	Ms. Jeanette			72-460 Rodeo Way	Rancho Mirage, CA 92270
Karcher	Ms. Dorothy			38396 Crocus	Palm Desert, CA 92260
Karen	Inman			PO Box 172	Desert Center, CA 92239
Kastor	Ms. Jean D.			38-608 Wisteria Drive	Palm Desert, CA 92234
Kazmaia	Renay			152 Gilley Street	March AFB, CA 92518
Kearn	Mr. & Mrs. Steve			PO Box 347	Desert Center, CA 92239
Kearns	Patricia J. Snyder &			74621 Leslie Avenue	Palm Desert, CA 92260
Keele	Craig & Larene			PO Box 255	Desert Center, CA 92239
Keller	Richard M.			53-065 Avenida Navarro	La Quinta, CA 92253
Kelley	Kim			914 Oak Street	Lafayette, CA 94549
Kennady	C.			P.O. Box 282	Desert Center, CA 92239
Kennedy	Betty			2729 La Gran Via	Carlsbad, CA 92009

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Kennedy	Jo			12618 3rd St.	Desert Center, CA 92239
Kessler	Dallas			P.O. Box 155	Desert Center, CA 92239
Ketel	Ed & Bev			Land Yacht Harbor #72	Desert Center, CA 92239
Kirby	Claude			PO Box 518	La Quinta, CA 92253
Kirby	Virgil & Karen			PO Box 220	Desert Center, CA 92339-0220
Kishineff	Mr. S.			76-741 Chrysantheum Way	Palm Desert, CA 92660
Kitakis	Mr. John			77-777 Country Club Drive	Palm Desert, CA 92260
Kite	Ms. Kristy			71-205 Thunderbird Terrace N.	Rancho Mirage, CA 92270
Klecker	Don & Elsie			Land Yacht Harbor #65	Desert Center, CA 92339
Klingler	Cole			Land Yacht Harbor #92	Desert Center, CA 92239
Klingler	Darwin & Joann			1107 Cottonwood	Desert Center, CA 92239
Kloepfer	Ben & Arlene			PO Box 7001	Desert Center, CA 92239
Knight	Gene & Sharon			1107 Cottonwood	Desert Center, CA 92239
Krajczynski	Mrs. Dorothy			1 Beaver Tail Lane	Palm Desert, Ca 92226
Kubik	Ms. Paula			P.O. Box 1104	La Quinta, CA 92253
Lake	Ms. Lucy C.			38-633 Wisteria Drive	Palm Desert, CA 92260
Lamon	Cliff & Vivian Lamo			P.O. Box 61	Desert Center, CA 92239
Land	Michelle			2421 N. Driftwood	Rialto, CA 92376
Landgreen	Myron & Gouldie			PO Box 443	Desert Center, CA 92239
Lane	Mr. & Mrs. James V			43-155 Portola Avenue, #83	Palm Desert, CA 92260
Lane	Ms. Mary C.			73450-151 Country Club Drive	Palm Desert, CA 92260
Lanham	David			3719 Washington St.	Riverside, CA 92502
Larson	Mr. & Mrs. Cliff			P.O. Box 61	Desert Center, CA 92239
Larstead	Florence			425 Sylvan Ave	Banning, CA 92220
Larstead	Sgt. Thom			P.O. Box 423	Desert Center, CA 92239
Latting	Dr. June			320 Maravilla Dr.	Riverside, CA 92507
Lavender	John			P.O. Box 3876	Palm Desert, CA 92260
Lawman	Mr. Robert C.			73-816 De Anza	Palm Desert, CA 92260
Lazansky	Laurie & David			39-239 Regency Way	Palm Desert, CA 92260
LeDuc	Mr. & Mrs. Richard			838 Sapphire Street	San Diego, CA 92109
LeWinn	Mr. L. R.			71-170 Patricia Park Place	Rancho Mirage, CA 92270
Lemon	Connie			PO Box 234	Desert Center, CA 92239
Lessin	Irvine L.			1080 S. Farrell	Palm Springs, CA 92264
Lessin	Mrs. Frances G.			1080 S. Farrell Drive	Palm Springs, CA 92264-8641
Levin	Mrs. Marion			P. O. Box 390	Rancho Mirage, CA 92270
Lewis	Ms. Mary E.			1527 10th Street	Santa Monica, CA 90401
Lied	Mr. Milton B.			P.O. Box 3686	Palm Desert, CA 92261-3686
Lilly	Mrs. Martha M.			65 Don Quixote	Rancho Mirage, CA 92270
Linsk	Ms. Nelda			443 Merito Place	Palm Springs, CA 92262
Liu	David			26301 Rice Road	Desert Center, CA 92239
Livengood	Ms. Marian R.			P.O. Box 327	Desert Center, CA 92239
Lloyd	John & Susan			PO Box 677	Desert Center, CA 92239
LoKoen	Ms. Rowena L.			52-230 Avenida Villa	La Quinta, CA 92253
Lockhart	Betty & William			39-114 Desert Greens Drive, E.	Palm Desert, CA 92260

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Lockhart	Dean			P.O. Box 468	Desert Center, CA 92239
Lockhart	Richard & Rowe			43550 Ragsdale Road #37	Desert Center, CA 92239
Lombardi	Ms. Carol			3086 Jan Circle	Palm Springs, CA 92262
Lopez	Mr. Javier H.			1515 Sixth Street	Coachella, CA 92236
Lopez	Ms. Joann			13-101 West Drive	Desert Hot Springs, CA 92240
Lopez	Ms. Lorraine M.			100 S. Sunrise Way, Suite 479	Palm Springs, CA 92262
Lorey	Ms. Carilee M.			51-125 Eisenhower Drive	La Quinta, CA 92253
Lorren	Ms. Rosanne M.			38-612 Gladiolus Lane	Palm Desert, CA 92260
Lovegren	Ms. Gertrude E.			360 Monte Vista Drive	Palm Springs, CA 92262-7320
Loveton	Mr. & Mrs. John			76-241 Poppy Lane	Palm Desert, CA
Lua	Ms. Lorena			P.O. Box 772	Mecca, CA 92254
Lucas	Ms. Rosa Sue			74-351 Santolina Drive	Palm Desert, CA 92260
Lynch	Olen & kay			Land Yacht Harbor #34	Desert Center, CA 92239
Mabon Jr.	Mr. Herbert L.			2950 N. Indian Canyon, #116	Palm Springs, CA 92262
Mackay	Shirley			PO Box 325	Desert Center, CA 92239
Maguire	Tom			72-600 Fred Waring #1606	Palm Desert, CA 92260
Mahoney	Mr. Pat			4441 Mockingbird Lane	Banning, CA 92270
Mandel	Ms. Bess			34-807 Calle Trujillo Ave.	Cathedral City, CA 92234
Mann	Mr. Robert			610 S. Camino Real, #a	Palm Springs, CA 92262
Manuell	Ms. Deborah			76-273 Fairway Drive	Indian Wells, CA 92210
Mapula	Ms. Susan L.			120 Garner Valley	Mountain Center, CA 92561
Marcks	Ms. Deborah			3969 Mahailla Avenue, #112	San Diego, CA 92122
Marguire	Mr. Tom			72-600 Fred Waring Drive,#1606	Palm Desert, CA 92260
Markman	Mr. & Mrs. Robert			75-396 Stardust Lane	Indian Wells, CA 92210
Marlow	Dave			Route 2, Box 296	Blythe, CA 92225
Marrs	Bill			PO Box 141	Desert Center, CA 92239
Marsh	Mr. Jack			38-47 Crocus	Palm Desert, CA 92260
Marsh	Ms. Sharlyn			36-688 Nasturtrium Way	Palm Desert, CA 92660
Martin	Ms. Kay D.			75-540 Vista Del ray	Indian Wells, CA 92210
Martin	Wayne			932 Verbena	Desert Center, CA 92239
Mata	Ms. Catherine			83-481 Emerald Street	Indio, CA 92201
Maybury	Mr. John			160 San Jose Avenue	Pacifica, CA 94044
Mayer	Mr. Steve			80-000 Ave 48, #221	Indio, CA 92201
McBride	Mr. Gerald B.			19-490 Tonto Road	Apple Valley, CA 92307
McCanthey	Ms. Jeannine			72592 Edgehill, #2	Palm Desert, CA 92260
McColm	Patricia N. & Rhett			5300 Waverly Drive, I-10	Palm Springs, CA 92264
McDonell	F. S. & Eileen			44-299 Dakota Trail	Palm Desert, CA 92260
McDowell	Rylie & Nancy			PO Box 7103	Desert Center, CA 92239
McGarvin	Ms. Melissa A.			505 S. Farrell, #B12	Palm Springs, CA 92264
McGaughran	Ms. Darcie			68-380 Bahada Road	Cathedral City, CA 92234
McGuire	Tom & Liz			PO Box 107	Desert Center, CA 92239
McIntyre	J. M.			P.O. Drawer AR	Blythe, CA 92226
McKay	Wendy W.			45-540 Apache Road	Indian Wells, CA 92210
McKee	Brandon			6040 Windemere Way	Riverside, CA 92506

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
McMahon	Ed & Diane			44245 Camino Azul	La Quinta, CA 92253
McMichael	Ina			P.O. Box 505	Desert Center, CA 92239
McMurray	Mr. John			74-940 Hwy 111	Indian Wells, CA 92210
McReynolds	Ms. Alice B.			73-373 Country Club Drive	Palm Desert, CA 92260
Mcbride	Mr. & Mrs. Darrell			PO Box 347	Desert Center, CA 92239
Means	Phillip			PO Box 107	Desert Center, CA 92239
Medina	Ms. Laine			P. O. Box 2761	Palm Desert, CA 92261
Mejia	Lizabeth			1144 Gayland Avenue	Hacienda Heights, CA 91745
Meseck	Mr. Herbert			57-622 Sierra Way	Yucca Valley, CA 92284
Meseck	Mr. Robert M.			4047 Heatherwood Hollow	Moorpark, CA 93021
Meyerhoff	Ms. Natalie & Eliza			342 Via Sol	Palm Springs, CA 92262
Michaels	Mr. Al			72-526 Desert Flower	Palm Desert, CA 92260
Mildred	Tong			1057 Whitman	Claremont, CA 91711
Miller	Bill			P.O. Box 445	Desert Center, CA 92239
Miller	Carol			11407 Fredson Street	Santa Fe Springs, CA 90670
Miller	Mrs. Dorothy A.			P.O. Box 1127	Palm Desert, CA 92261
Miller	Ms. Joni			P. O. Box 469	Rancho Mirage, CA 92270
Miller	William & Katharina			PO Box 445	Desert Center, CA 92239
Milligan	Ray & Bernice			PO Box 301	Desert Center, CA 92239
Moltz	Mr. & Mrs.			P.O. Box 107	Desert Center, CA 92239
Montoya	Daniel & Julie			4351 Ragsdale Rd	Desert Center, CA 92239
Moody	Mr.			P.O. Box 107	Desert Center, CA 92239
Moody	Ms. Mary			1440 Driftwood Drive	Palm Springs, CA 92262
Moon	Don			PO Box 74	Desert Center, CA 92239-0074
Moon	Ms. Erika			74-200 Erin Street	Palm Desert, CA 92262
Moore	Ms. Heidi	Eco-Watch/Sonoma		300 Ryan Ranch Road	Sebastopol, CA 95472
Moore	Ms. Linda Greve			46 Karen Lane	Palm Springs, CA 92262
Moorman	Ms. Evelyn			4444 Sunny Dunes, #1	Palm Springs, CA 92264
Morgan	A. L.			P.O. Box 462	Blythe, CA 92226
Morrison	Cliff & Alice			Land Yacht Harbor	Desert Center, CA 92239
Morse	Mr. Todd			46-896 Jefferson St., #68	Indio, CA 92201
Muller	Ms. Janet E.			43-160 Texas Avenue	Palm Desert, CA 92260
Murdica	Ms. Connie E.			68-090 Calle Blanco	Desert Hot Springs, CA 92240
Murdica	Ms. Tami L.			68-150 Louslan Street	Desert Hot Springs, CA 92240
Murphy	David & Ruth			PO Box 107	Desert Center, CA 92239
Myer	Greg			P.O. Box 421	Desert Center, CA 92239
Nagel	Ms. Melissa			72-534 Edgehill Drive, #3	Palm Desert, CA 92260
Nash	Don & Melissa			PO Box 107	Desert Center, CA 92239
Navarro	Rosalie & David			2899 San Juan Road	Palm Springs, CA 92262
Nazzaro	Ms. Mary Ann			68-383 Moonlight Drive	Cathedral City, CA 92234
Negortti	Mr. Glenn			73-230 Virginia	Palm Desert, CA 92260
Nelson	Ms. Michelle			12-605 Redbud Road	Desert Hot Springs, CA 92240
Nelson	Wilfred & Donna			PO Box 310	Lake Hughes, CA 93532
New	Mr. & Mrs. Robert L			71-715 Tunis Road	Rancho Mirage, CA 92270

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
New	Shea & Larry			71-715 Tunis Road	Rancho Mirage, CA 92270
Nichols	Peter			PO Box 106	Desert Center, CA 92239
Nicolai	Nancy			3983 Idaho St.	San Diego, CA 92104
Nies	Geraldine			PO Box 324	Desert Center, CA 92239
Noland	Ms. D. Theresa			68-383 Moonlight Drive	Cathedral City, CA 92234
Non	Ramer			1134 Country Valley	West Lake, CA 91362
Nusbaum	Mr. Jerry			56 Wagon Jack Lane	Arcata, CA 95521
O'Bryan	Anita			3606 Bandinz Ave	Riverside, CA 92508
Ocadiz	Mr. Frank J.			68-132 Valley Vista Drive	Cathedral City, CA 92234
Ogburn	Gary & Rena			PO Box 7023	Desert Center, CA 92239
Ogburn	Valton & Dorothy			PO Box 368	Desert Center, CA 92239
Ollivier	Gary & Ann			26500 Catalina	Desert Center, CA 92239
Ordaz	Francisco & Maria			PO Box 482	Desert Center, CA 92239
Ostrow	Ms. Cookie			123 Blue River Drive	Palm Desert, CA 92260
Overman	Richard & Karen			PO Box 338	Desert Center, CA 92239
Overson	Eric			PO Box 432	Desert Center, CA 92239
Overson	Eugene & Jeanine			PO Box 383	Desert Center, CA 92239
Pallette	Drew			68045 Montrico	Desert Hot Springs, CA 92240
Paquin	Mr. Joseph R.			27-185 Scott Road	Sun City, CA 92381
Parcells	Ms. Louise			80-800 Avenue 48, Space #111	Indio, CA 92201
Parker	Mr. Robert			32-420 Shifting Sands Trail	Cathedral City, CA 92234
Parker	Reverend Dean E.			P.O. Box 586	Desert Center, CA 92239
Patterson	Mr. & Mrs.			P.O. Box 254	Desert Center, CA 92239
Paull	Ms. Valerie			624 Ocotillo	Palm Springs, CA 92262
Pelosi	Nancy	U.S. Member, House of Representatives		450 Golden Gate Ave	San Francisco, CA 94102
Perales	Ms. Trina			46-541 Padera Circle	Indio, CA 92201
Perez	Laura A. & Ronald			81-027 Pecos Place	Indio, CA 92201
Perez	Mr. & Mrs.			P.O. Box 355	Desert Center, CA 92239
Perezchica	Mr. Jorge			31-569 Ave Lagoviota	Cathedral City, CA 92234
Perry	Ms. Kitty R.			21 Cornell Drive	Rancho Mirage, CA 92270
Peterson	Gordon			General Delivery	Desert Center, CA 92239
Peterson	Mr. & Mrs. Bob			PO Box 347	Desert Center, CA 92239
Pills	Mr. & Mrs. J.R.			1161 Joshua Tree Lane	Blythe, CA 92226
Pinson	Dave			P.O. Box 83	Desert Center, CA 92239
Pletz	Marilyn			699 Canon Drive	Palm Springs, CA 92264
Plunkett	Mr. Russell W.			73-450 Country Club Drive	Palm Desert, CA 92260
Pollard	Ms. Kimberly A.			73-471 Buckboard Trail	Palm Springs, CA 92260
Pollard	Susan & William			PO Box 521	Desert Center, CA 92239-0521
Pomerantz	Mr. Stanley			4 Churchill Lane	Rancho Mirage, CA 92270
Porter	Mr. & Mrs. Karl			38-270 Plumsoa Circle	Palm Desert, CA 92260-5039
Powell	Glen & Mary			PO Box 63	Desert Center, CA 92239
Pticar	Mr. Mario			89-335 Horizon Palms Circle	La Quinta, CA 92253
Quimby	Wayne			P.O. Box 201	Desert Center, CA 92239
Quirk	Mr. Ronald			P.O. Box 305	Julian, CA 92036

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Ragsdale	Crystal			PO Box 198	Desert Center, CA 92239
Ragsdale	Jeff & Sherry			P.O. Box 166	Desert Center, CA 92239
Ragsdale	Pauline & David			PO Box 66	Desert Center, CA 92239
Ragsdale	Sidney			P.O. Box 431	Desert Center, CA 92239
Ragsdale	Stanley			P.O. Box 257	Desert Center, CA 92239
Rash	Mrs. Laura			P.O. Box 1011	Palm Desert, CA 92261
Rasmussen	Ms. Cherlye			81-211 Palmyra	Indio, CA 92201
Ratcliff	Bill			PO Box 284	Desert Center, CA 92239-0284
Rathwell	Harold & Betty			44161 Crystal Way	Desert Center, CA 92239
Ratz	Yvette			18900 Jura Lane	Fiddletown, CA 95629-9700
Rawnsley	Mr. Richard W.			P.O. Box 832	Morongo Valley, CA 92256
Raymond	Ms. Sandra K.			P.O. Box 521	Joshua Tree, CA 92252
Reames	Allen & Maria E.			P.O. Box 471	Desert Center, CA 92239
Reed	Clyde			6657 Cathy Place	Riverside, CA 92504
Reed	George			6694 Oakmont Dr	Santa Rosa, CA 95409
Reed	Larry & Kathy			P.O. Box 175	Desert Center, CA 92239
Reed	Mr. George			HCO-2 Box 649	Twentynine Palms, CA 92277
Reeves	Bob			PO Box 107	Desert Center, CA 92239
Reinhart	Chip & Maria			PO Box 599	Desert Center, CA 92239
Reiss	Richard & Violet			11985 Torrry Pines Drive	Auburn, CA 95603
Reistroffer	R. Reistroffer		26440 Rice Road	P.O. Box 652	Desert Center, CA 92239
Rendulic	Phyllis & John			79-335 Horizon Palms Circle	La Quinta, CA 92253
Renzi	Vance & Carolyn			Land Yacht Harbor #149	Desert Center, CA 92239
Riconosciuto	Ms. Karen M.			81-663 Lido Avenue	Indio, CA 92201
Rider	Don & Ruth			Land Yacht Harbor #131	Desert Center, CA 92239
Riffle	Ms. Barbara			23 Circle A Drive	Palm Desert, CA 92260
Ritter-Grimm	Ms. Bethanyanne			81-256 Palmwood Drive	Indio, CA 92201
Rivers	Walter			227 Monte Vista	Larkspur, CA 94939
Roach	Nathan & Shannon			PO Box 107	Desert Center, CA 92239
Roberts	Jan			PO Box 37	Desert Center, CA 92239
Robles	Ms. Diana A.			74-821 Borrego Drive	Palm Desert, CA 92260
Rodarte	Micky & Nattie			P.O. Box 391	Indio, CA 92202
Rodgers	Mr. Peter			38-452 Plumosa Circle	Palm Desert, CA 92260
Rodney	Ms. Rhea			72-303 Blueridge	Palm Desert, CA 92260
Rodriguez	Max & Lucy			PO Box 518	Desert Center, CA 92239
Rodriguez	Mr. Jeffrey D.			53-520 Avenida Madero	La Quinta, CA 92253
Rodriguez	Ms. Delores			68-595 F. Street	Cathedral City, CA 92234
Rodriguez	Ms. Edith			P.O. Box 713	Thermal, CA 92274
Rogers	Janelle			650-23 South Rancho Sante Fe	San Marcos, CA 92069
Rogers	Keith			1070 Mesquite Ave	Palm Springs, CA 92262
Roland	Carl & Regina			PO Box 347	Desert Center, CA 92239
Roman	Mr. Joseph A.			2825 E. Tahquitz Way, Ste D-1	Palm Springs, CA 92262
Roman	Mr. Robert			P. O. Box 2000	Indio, CA 92202
Roman, Jr.	Robert E.			44446 Biskra Street	Indio, CA 92201

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Romano	Ms. Eileen			58-073 Hidden Gold	Yucca Valley, CA 92284
Romero	Mr. & Mrs. Walter			57-087 Yucca Trail #1	Yucca Valley, CA 92284
Romero	Ms. Renee			P. O. Box 1592	La Quinta, CA 92253
Root	Jim Root			P.O. Box 233	Desert Center, CA 92239
Rose	Mr. Bozena			P.O. Box 2602	Indio, CA 92202
Rosen	Ms. Marie			39-670 Morongo Canyon	Palm Desert, CA 92260
Rosenfield-Rudin	Mrs. Elaine			47 La Ronda Drive	Rancho Mirage, CA 92270
Ross	Ms. Johanna			P.O. Box 1235	Palm Springs, CA 92263
Roth	Ms. Diane K.			79-151 Starlight Lane	Bermuda Dunes, CA 92201
Rouda	Ms. Dawn V.			45-580 Via Corona	Indian Wells, CA 92210
Rourke	Trigg R.			P.O. Box 7102	Desert Center, CA 92239
Rowe	Albert & Dorothy			P.O. Box 62	Desert Center, CA 92239
Rusche	Margit			Chiriaco Summit	Desert Center, CA 92239
Salisbury	Ms. Clara			74-241 Zircon	Palm Desert, CA 92260
Salmon	Mr. & Mrs. Richard			64-973 Oakmount	Desert Hot Springs, CA 92240
Salz	Ron Salz			P.O. Box 1450	Palm Springs, CA 92263-1450
Samons	Vince & Christine			43-650 Carmel Circle	Palm Desert, CA 92260
Sanchez	Alberto & Irma			44430 Thurman St	Desert Center, CA 92239
Sanford	Chuck			PO Box 211	Desert Center, CA 92239
Sansom	Mrs. Florence			33-035 Guadalajara	Thousand Palms, CA 92276
Sargent	Spencer & Marilyn			4466 Toyon Rd	Riverside, CA 92504
Saute	Ms. Jennifer			78-650 Ave Tujanga	La Quinta, CA 92253
Savage	William			930 Unruh, Apt. 3	La Puente, CA 91744
Scarpinato	A. L.			303 N. Indian Ave.	Palm Springs, CA 92262
Schaefer	Mr. & Mrs. Ron			68-318 Peladora	Cathedral City, CA 92234
Schullo	Stephen A.			1955 Via Miraliste, #13/15	Palm Springs, CA 92262
Schultz	Ms. Ruby N.			3576 Bogert Trail	Palm Desert, CA 92264
Scoggin	Dick & Royleen			Land Yacht Harbor #126	Desert Center, CA 92239
Scorsone	Ms. Carol Denise			69-816 Bluegrass Way	Cathedral City, CA 92234
Scott	Mr. & Mrs. Kenneth			76-654 Pansy Lane	Palm Desert, CA 92260
Scott	Mr. John			73-266 Perez, D-9	Cathedral City, CA 92234
Scott	Ms. Suzanne			73-266 Goldflower	Palm Desert, CA 92260
Seder	Mr. & Mrs. Warren			76-491 Sweet Pea Way	Palm Desert, CA 92260
Selby	Harvey & Bea			PO Box 217	Desert Center, CA 92239
Semore	Kim			PO Box 162	Desert Center, CA 92239-0162
Semore	Suzan			840 Palo Verde Dr. PO Box 162	Desert Center, CA 92239-0162
Shannon	Myrtle			PO Box 115	Desert Center, CA 92239
Shearer	Mrs. Jo			72-742 Willow, #2	Palm Desert, CA 92260
Sikorsi	Ron			45590 Grace St.	Indio, CA 92201
Silvers	Randy			11267 Pegasus Avenue	San Diego, CA 92126
Silvey	Lorraine			26791 Fountain Cove Dr.	Desert Center, CA 92239
Simmons	Ms. Mary			80-380 Ave 43	Indio, CA 92201
Simonsen	Mrs. Betty Lee			38-497 Nasturium Way	Palm Desert, CA 92260
Sims	Darroyl & Margie			PO Box 138	Desert Center, CA 92239

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Skarda, C.SS.R.	Brother David			233 Lake Avenue	Saratoga Springs, CA 12866-2729
Skates	Paul & Vernessa S			30925 Montgomery Ave.	Nuevo, CA 92367
Smiler	Ms. Donna			225 Ave Palmera, #18	Palm Springs, CA 92264
Smiley	Mr. Steven	Citizens for the Chuckwalla Valley		P.O. Box 397	Desert Center, CA 92239
Smith	Mr. & Mrs. Lester			899 Island Drive, #702	Rancho Mirage, CA 92720
Smith	Mr. D. William			48-300 Mariposa Drive	Palm Desert, CA 92260
Smith	Mr. James W.			P.O. Box 1990	Alpine, CA 91903
Smith	Mr. Russell			77-022 California Drive	Palm Desert, CA 92260
Smith	Ms. Marilynn R.			47-316 Via Genoa	Indio, CA 92201
Smith	Patricia M.			899 island Drive #702	Rancho Mirage, CA 92270
Snyder	Mr. Peter			51-860 Hessera	La Quinta, CA 92253
Snyder	Ms. Patricia J.			74-621 Leslie Avenue	Palm Desert, CA 92260
Soares	Ms. Jolie			77-230 California Drive	Palm Desert, CA 92260
Solomon	Mr. Peter			76-857 Abby Court	Palm Desert, CA 92260
Spandan	Anne R.			47316 Via Genoa	Indio, CA 92201
Spence	Ms. Cindy			2200 Janis	Palm Springs, CA 92262
Spencer	E.O.			151 North Arden	Los Angeles, CA 90004
Stanger	Mr. Rob			432 Sunningdale	Ranch Mirage, CA 92270
Stanley	Vera			P.O. Box 7014	Desert Center, CA 92239
Starner	Mr. & Mrs. Robert			73-202 Foxtail lane	Palm Desert, CA 92260
Stasi	Mr. & Mrs. Al			PO Box 347	Desert Center, CA 92239
Statler	Ken & Mary			PO Box 159	Desert Center, CA 92239
Stewart	Franklin C.A.			25820 Via Jacara Court	Moreno Valley, CA 92553
Stewart	Mr. Thomas E.			76-651 Daffodil	Palm Desert, CA 92660
Stewart	Ms. Tamam A.			70-551 Placerville	Rancho Mirage, CA 92270
Stisken	Ms. Stella			50 Pine Valley Drive	Rancho Mirage, CA 92270
Stokes	Jerry			P.O. Box 317	Desert Center, CA 92239
Stone	Mr. Gerald			48-123 Via Hermosa	La Quinta, CA 92253
Stone	Ms. Joanne			48-123 Via Hermosa	La Quinta, CA 92253
Strain	James			1920 Underwood Rd.	Holtville, CA 92250
Strang	Ms. Linda J.			810 Rose Avenue	Palm Springs, CA 92262
Stratton	Ms. Patsy			71-701 Cholla Way	Palm Desert, CA 92260
Strebbins	Robert C.			University of California	Berkley, CA 94720
Street	Gerald & Nina			Lake Tamarisk Drive	Desert Center, CA 92239
Stuart	Mr. Franklin C. A.			25-820 Via Jecara Court	Moreno Valley, CA 92553
Sullivan	Mr. Michael J.			54-345 Ave Ramirez	La Quinta, CA 92253
Sullivan	Ms. Kara			74-351 Santolina Drive	Palm Desert, CA 92260
Swan-Draper	Ms. Stacey			74-671 Prospector	Palm Desert, CA 92260
Swap	Edith			43940 Shadow Way	Desert Center, CA 92239
Swerdlow	Ms. Evelyn			90 Santa Anita	Rancho Mirage, CA 92270
Taber	Allan			PO Box 373	Desert Center, CA 92239
Targon	Ms. Mildred			38-338 Crocus lane	Palm Desert, CA 92260
Taylor	Ms. Paula			1488 E. Ramon Road, #243	Palm Springs, CA 92264
Tenold	Mr. Daniel			68-132 Valley Vista	Cathedral City, CA 92234

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Thiebaud	Ms. Patricia			47-376 Jadida	Palm Desert, CA 92260
Thompson	Ms. Jeannine			66-735 12th Street, B5	Desert Hot Springs, CA 92240
Thompson	Ms. Phyllis			76-248 Impations Circle	Palm Desert, CA 92660
Thompson	Ms. Yvonne K.			72-577 Edgehill Drive, #4	Palm Desert, CA 92260
Thorness	Mr. James E.			1863 Park Drive	Palm Springs, CA 92262
Thurston	Tom & Shirley			PO Box 107	Desert Center, CA 92239
Tiffee	John & Shirley			26500 Greenvale Way	Desert Center, CA 92239
Tipton	Mr. Ronald W.			Box 5133, MGACC	Twentynine Palms, CA 92278
Tirpak	Marie			P.O. Box 293	Desert Center, CA 92239
Tisdel	Bob & Gert			PO Box 231	Desert Center, CA 92239
Tisdel	Mr. & Mrs.			P.O. Box 602	Chiriaco Summit, CA 92201
Tisdel	Steve & Freda			PO Box 124	Desert Center, CA 92239
Toenjas	Mr. Morrison R. &			1863 Park Drive	Palm Springs, CA 92262
Toomey	Ms. Jane B.			54-995 Shoal Cree	La Quinta, CA 92253
Toria	Ms. Elsie V.			320 S. 4th Street	Blythe, CA 92225
Torres	Oscar & Ila			PO Box 122	Desert Center, CA 92239
Tounjus	Harrison R.			1863 Park Drive	Palm Springs, CA 92263
Toussaint	Mr. & Mrs. Ronald			82-610 Doolittle	Indio, CA 92201
Tramontano	Mr. Paul			P. O. Box 172	Sequoia National Park, CA 93262
Troup	Ms. Jodie			40-300 Washington Street	Bermuda Dunes, CA 92201
Truax	Betsy			301 Ishica Ave.	Rancho Cucamonga, CA 91730
Truitt	Mickey & Will			44080 Shadow Way	Desert Center, CA 92239-0104
Tucker	Ms. Sylvia B.			72-816 BelAir Road	Palm Desert, CA 92260
Turner	Lyle			18583 Alexandra Way Site 73	Grass Valley, CA 95949-7357
Turpen	Brian			PO Box 347	Desert Center, CA 92239
Utt	Ms. Mary			47-740 Zoila	Indio, Ca 92201
Van Matre	Buster & Audrey			PO Box 487	Desert Center, CA 92239
Vanderholf	Virginia			Chiriaco Summit #1	Indio, CA 92201
Vann	John & Dannia			PO Box 426	Desert Center, CA 92239
Vann	Kim			P.O. Box 317	Desert Center, CA 92239
Velchin	Mrs. Norma			76651 Poppy Lane	Palm Desert, CA 92260
Very	Roland & Dorothy			P.O. Box 736	Desert Center, CA 92239
Vogel	Mr. Adolf W.			796 High Road	Palm Springs, CA 92262
Vreede	Mr. William			48-080 Birdie Way	Palm Desert, CA 92260
Waldren	Ken & Aimee			LYH #8	Desert Center, CA 92239
Walker	Mr. Gary			53-705 Avenida Diaz	La Quinta, CA 92253
Ward	Byron & Norma			Land Yacht Harbor #94	Desert Center, CA 92239
Warner	John R.			P.O. Box 387	N. Palm Springs, CA 92258-0387
Warren	Paul & Margaret			PO Box 7303	Desert Center, CA 92239
Welchlin	Norma			76651 Poppy Lane	Palm Desert, CA 92260
Welty	Brook			77665 Barons Circle	Palm Desert, CA 92260
Wenner	Mr. & Mrs. Thomas.			25 Coble Drive	Cathedral City, CA 92234
Weston	Ms. June T.			32-748 Bloomfield	Thousand Palms, CA 92276
Wetty	Ms. Brooke			77-665 Barons Circle	Palm Desert, Ca 92260

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
Whalen	Pat			43940 Shadow Way	Desert Center, CA 92239
White	Mr. James D.			39-840 Narcissus Way	Palm Desert, CA 92260
White	Paul & Laura			Land Yacht Harbor #112	Desert Center, CA 92239
Whitehouse	James			6529 Riverside Ave #150	Riverside, CA 92506
Wiener	Mr. Alan			38-398 Zinnia	Palm Desert, CA 92660
Wilkin	Joe & Mary Ellen			PO Box 725	Desert Center, CA 92239
Wilkin	Steve & Cindy			PO Box 727	Desert Center, CA 92239
Wilks	Ms. Diana			76-299 Dahlia	Palm Desert, CA 92260
Williams	James & Marilyn			26501 Greenvale Way	Desert Center, CA 92239
Williams	Janet & Roy			Land Yacht Harbor #113	Desert Center, CA 92239
Williams	Marilyn			P.O. Box 353	Desert Center, CA 92239
Williams	William & Pat			PO Box 382	Desert Center, CA 92239-0382
Willsey	Ms. Dawn			32-190 Monte Vista	Cathedral City, CA 92234
Wilson	Lester & Barbara			PO Box 278	Desert Center, CA 92239
Wilson	Mr. & Mrs. Tom			PO Box 347	Desert Center, CA 92239
Wilson	Mr. Jerry			3788 Melrose, #49	Cathedral City, CA 92234
Wilson	Ms. Susan			37 Clancy Lane South	Rancho Mirage, CA 92270
Winner	Mrs. Alan M.			73-163 Somera Road	Palm Desert, CA 92260
Wiseman	Richard & Barbara			Land Yacht Harbor #68	Desert Center, CA 92239
Wolfe	Mr. & Mrs. Gary			38-568 Nasturtium Way	Palm Desert, CA 92260
Wolfman	Ms. Lori B.			78-990 Indian Wood Court	La Quinta, CA 92253
Wood	Barry			13211 Deron Avenue	San Diego, CA 92129
Wood	Terry			P.O. Box 132	Desert Center, CA 92239
Woody	Charles & Marita			PO Box 210	Desert Center, CA 92239
Wucker	Ms. Carolyn			53-920 Eisenhower Drive	La Quinta, CA 92253
Xepoln	Mr. Anthony			38-011 Clocus Lane	Palm Desert, CA 92260
Zieler	Mary			PO Box 135	Desert Center, CA 92239
d'Entremont	Ms. Aileen			53-815 Herrera	La Quinta, CA 92253
		California State Library	Government Publications	PO Box 942837	Sacramento, CA 94237
		Indio Branch Library		200 Civic Center Mall	Indio, CA 92201
		Palm Desert Public Library		4480 Portola	Palm Desert, CA 92260
		Riverside Central Library	Governments Documents Section	381 Seventh St.	Riverside, CA 92501
		San Bernardino County Library	Yucca Valley Branch	6078 Adobe Road	Yucca Valley, CA 92284
		College of the Desert Library		43-500 Monterey Ave.	Palm Desert, CA 92260
		Coachella Branch Library		1538 7th St.	Coachella, CA 92236
		Lake Tamarisk Branch Public Library		43880 Lake Tamarisk Dr.	Desert Center, CA 92239
		Palm Springs Library Center		300 S. Sunrise Way	Palm Springs, CA 92262
		San Bernardino County Library	Joshua Tree Branch	6465 Park Blvd.	Joshua Tree, CA 92252
		San Bernardino Public Library	Feldheym Central Library	W. 6th St.	San Bernardino, CA 92410
		Riverside Community College	Martin Luther King Library	4800 Magnolia Ave.	Riverside, CA 92506
		Desert Hot Springs Public Library		11691 West Dr.	Desert Hot Springs, CA 92240
		Los Angeles Public Library	Documents Department	433 Spring St.	Los Angeles, CA 90013
		Palo Verde Valley District Library		125 W. Chanslor Way	Blythe, CA 92225
		San Bernardino County Library	Yucca Valley Branch	57098 Twentynine Palms Hwy.	Yucca Valley, CA 92284

LNAME	NAME	NAME2	NAME3	STREET	CITYSTZIP
		UC Riverside Library	Government Publications	PO Box 900	Riverside, CA 92517
Huse	Mr. Brian	National Parks Conservation Assoc.		PO Box 1289	Oakland, CA 94604
Foondos	Georgiana, Remy,			455 Capitol Mall, Suite 210	Sacramento, CA 95814
Lowe	Mr. Arthur	Eagle Crest Energy Corp.		1 Hawkeye, 69846 Hwy 111, # B	Rancho Mirage, CA 92270
Charpied	Mr & Mrs. L.R.			PO Box 321, 45-200 Kaiser Rd.	Desert Center, CA 92239
Moskowitz	Mr. Joel	Gibson, Dunn & Crutcher		333 S. Grand Avenue	Los Angeles, CA 90071
		Federal Energy Regulatory Commission		1516 Ninth St., MS-44	Sacramento, CA 95814
		Department of Transportation		2501 Pullman Street	Santa Ana, CA 92705
Murray	Ray	National Park Service		600 Harrison St., Suite 600	San Francisco, CA 94107-1372
		Department of Water Resources		1020 Ninth St., 3rd Floor	Sacramento, CA 95814
		State Lands Commission		100 Howe, Suite 100 South	Sacramento, CA 95825-8201
Fry	Ms. Barbara	Air Resources Board		2020 "L" Street	Sacramento, CA 95814
		Office of Historic Preservation		1416 Ninth Street	Sacramento, CA 95814
		State Water Resources Control Board		PO Box 944212	Sacramento, CA 94244-2120
		Integrated Waste Management Board		8800 Cal Center Drive	Sacramento, CA 95826
		Native American Heritage Commission		968 Capitol Mall, Room 564	Sacramento, CA 95814
		Caltrans - District #8		247 W. Third Street	San Bernardino, CA 92402
		California Dept. of Fish & Game		601 Locust	Redding, CA 96001
		US Environmental Protection Agency		75 Hawthorne	San Francisco, CA 94105
		South Coast Air Quality Mgmt. District		21865 E. Copely Dr.	Diamond Bar, CA 91765
		Regional Water Resources Control Board		101 Center Plaza Park	Monterey, CA 91754
		Riverside County	Environmental Health Dept.	4065 County Circle	Riverside, CA 92503
		US Army Corps of Engineers		300 N. Los Angeles St.	Los Angeles, CA 90012
		US Fish & Wildlife Service		2730 Locker Ave. West	Carlsbad, CA 92008
		San Diego County	Planning Dept.	5201 Rouffin	San Diego, CA 92123
		Ventura County	Planning Dept.	800 S. Victoria	Ventura, CA 93009
		Santa Barbara County	Planning Dept.	123 E. Anapamu	Santa Barbara, CA 93101
		Santa Barbara County	Air Pollution Control District	26 Castillian Dr., B-23	Goleta, CA 93117
		San Diego County	Air Pollution Control District	9150 Chesapeake Dr.	San Diego, CA 92123-1096
		California Dept. of Corrections		PO Box 942883	Sacramento, CA 94283-0001
Quintana	Ernest	Joshua National Monument		74485 National Monument Dr.	29 Palms, CA 92277

PROOF OF PUBLICATION

(2010, 2015.5 CCP)

PROOF OF PUBLICATION OF

NOTIOFCOMP

EAGLE MTN.

I am a citizen of the United States. I am over the age of eighteen years and not a party to or interested in the above entitled matter. I am an authorized representative of THE PRESS-ENTERPRISE, a newspaper of general circulation, printed and published daily in the city of Riverside, County of Riverside, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of Riverside, State of California, under date of April 25, 1952, Case Number 54446, under date of May 29, 1957, Case Number 65673 and under date of August 25, 1995, Case Number 267864; that the notice, of which the annexed is a printed copy, has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to wit:

07/12/1996

I Certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated July 12, 1996
At Riverside, California

K. Peoples

PLANNING DEPT CO OF RIV

NOTICE of COMPLETION of a Draft Environmental Impact Statement/ Environmental Impact Report

A Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) for the proposed Eagle Mountain Landfill and Recycling Center (Project) has been completed, and is described as follows:

Development of a regional Class III landfill to be located on a portion of the Eagle Mountain open pit iron mine in eastern Riverside County, approximately 10 miles north of the community of Desert Center, about 200 miles east of Los Angeles, and approximately 50 miles west of the Arizona border. The Project site occupies approximately 4,654 acres, with the landfill itself covering 2,164 acres. The Project proposes to accept a maximum inflow of 20,000 tons of municipal solid waste per day from a seven county wasteshed area (Riverside, San Diego, Orange, San Bernardino, Los Angeles, Santa Barbara, and Ventura Counties). Of the total waste to be accepted, a project average of 16,000 tons per day will be shipped by rail, with the remaining 4,000 tons per day to be delivered by truck. The landfill has an anticipated lifespan of 117 years. The Project also includes the planned renovation and repopulation of the adjacent Townsite, as a result of a need to provide housing for landfill workers and their families.

Federal lands within the Project area have been selected by Kaiser Ventures, Inc. (Kaiser) to transfer ownership, in exchange for offered lands currently under ownership of Kaiser. The land exchange will be made pursuant to the Federal Land Policy and Management Act (FLPMA), Title II, Section 206. The selected lands total approximately 3,481 acres of publicly owned lands. The offered lands are generally located at certain sites along the Eagle Mountain railroad from Ferrum Junction to just north of Interstate 10. The land exchange process will also include a valuation of the reverter clause included in the deed granting ownership of the Eagle Mountain townsite to Kaiser, that would cause reversion of ownership to the Bureau of Land Management (BLM). FLPMA roads and railroad right-of-way grants are also contemplated for Eagle Mountain Road, the proposed Eagle Mountain Road extension, and the Eagle Mountain railroad.

County applications for the Project include Specific Plan No. 305, which will establish the permitted land uses, the development standards and design guidelines, as well as the regulatory and environmental performance standards for the proposed landfill; Comprehensive General Plan Amendment No. 402, which proposes to change the Open Space and Conservation Map designation for the site from "Mountain Areas," "Desert Areas," "Areas Not Designated as Open Space," and "Mineral Resources" to "Specific Plan No. 305", and the Eagle Mountain Sub-Area land use policies of the Chuckwalla Land Use Planning Area will also be revised to permit the proposed landfill and its related uses; Change of Zone No. 6249, which proposes to change the existing zoning designation of M-R-A (Mineral Resources and Related Manufacturing) to S-P (Specific Plan); Development Agreement No. 64, which proposes to establish an agreement between the County and the applicant, or their successors in interest, that would secure the right to develop the landfill in accordance with the landfill specific plan, and certain rules, policies, and ordinances in effect at the time the agreement is executed, as well as provide for certain specific public benefits, improvements and/or exactions; and Revised Permit No. 158 to Reclamation Plan No. 107, which will alter the adopted reclamation plan in favor of the proposed specific plans.

County applications for the townsite include Specific Plan No. 306, which would establish the permitted land uses, the development standards and design guidelines, as well as the regulatory and environmental performance standards for the townsite; Comprehensive General Plan Amendment No. 405 which proposes to change the Open Space and Conservation Map designation for the site from "Desert Area," and "Areas Not Designated as Open Space" to "Specific Plan No. 305"; Change of Zone No. 6253, which proposes to change the existing zoning designation of W-2 (Controlled Development), Natural Assets (N-A), General Commercial (C-1/C-P), and M-R-A (Mineral Resources and Related Manufacturing) to S-P (Specific Plan); and Tentative Tract Map No. 28217, which proposes to subdivide approximately 429 acres into a 12-lot/402 unit planned residential development.

Copies of the DEIS/DEIR are available for review at the Riverside County Planning Department Offices at 4080 Lemon Street, 9th Floor, Riverside, California 92502 and at 46-209 Oasis Street, 2nd Floor, Room 209, Indio, California 92201; and at the Bureau of Land Management Offices at 6221 Box Springs Blvd., Riverside, California 92507 and at 63-500 Garnett Avenue, North Palm Springs, California 92258

Copies of the document will also be provided to the following libraries for public review: Riverside City/County Public Library-Central Library; Lake Tamarisk Public Library; Indio Branch Library; Palm Desert Public Library; Desert Hot Springs Library; Palm Springs Library; Cathedral City Library; Rancho Mirage Library; Palo Verde Valley District Library; San Bernardino County Library (Main Branch, Joshua Tree Branch, Yucca Valley Branch); University of California, Riverside-Main Library (Thomas Rivera Library) College of the Desert Library; Riverside Community College Library; Los Angeles Public Library; California State Library (Sacramento).

Comments on the document must be submitted to the Riverside County Planning Department no later than 5:00 P.M. on September 10, 1996, to beincluded in the Final EIR, which will be presented to the Riverside County hearing bodies. Notification of the County of Riverside public hearings will be provided at a later date. Any comments or questions should be directed to David Mares - Senior Planner, Riverside County Planning Department, P.O. Box 1409, Riverside, CA 92502-1409. Telephone (909) 275-3275. 7/12

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DEPARTMENT OF THE INTERIOR
[CA-066-00-5440-00-ZBBB; CACA-30070; CACA-25594; CACA-31926]

Notice of Availability of Draft Eagle Mountain Landfill and Recycling Center Project Environmental Impact Statement/Environmental Impact Report, Riverside County, CA

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of Availability of the Draft Eagle Mountain Landfill and Recycling Center Project Environmental Impact Statement/Environmental Impact Report.

SUMMARY: In accordance with Section 202 of the National Environmental Policy Act of 1969, a draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) has been prepared for the Eagle Mountain Landfill and Recycling Center Project by the Bureau of Land Management (BLM) and County of Riverside. The EIS/EIR describes and analyzes six alternatives in addition to the proposed project. Mine Reclamation Corporation and Kaiser Eagle Mountain, Inc. has proposed to develop the project on a portion of the Kaiser Eagle Mountain Mine in Riverside County, California. The proposed project comprises a Class III nonhazardous municipal solid waste landfill and the renovation and repopulation of Eagle Mountain Townsite. The proposal by the proponent includes a land exchange and application for rights-of-way with the Bureau of Land Management and a Specific Plan, General Plan Amendment, Change of Zone, Development Agreement, Revised Permit to Reclamation Plan, and Tentative Tract Map with the County. The EIS/EIR analyzes the effects of the proposed action and alternatives on such environmental issues as desert tortoise, air and water quality, and wilderness. The BLM has not identified a preferred alternative in the Draft EIS/EIR; a preferred alternative will be identified in the Final EIS/EIR. Comments concerning the adequacy of this document will be considered in preparation of the Final EIS/EIR. Copies of the EIS/EIR are available for review at the following libraries:

Desert Hot Springs Public Library, 1691 West Drive, Desert Hot Springs, CA
Los Angeles Public Library, Documents Department, 433 Spring Street, Los Angeles, CA
Palo Verde Valley District Library, 125 W. Chanslor Way, Blythe, CA
San Bernardino County Library, Yucca Valley Branch, 57098 Twentynine Palms Highway, Yucca Valley, CA
University of California, Riverside Library, Government Publications, Riverside, CA
California State Library, Sacramento, CA
Indio Branch Library, 200 Civic Center Mall, Indio, CA
Palm Desert Public Library, 4480 Portola, Palm Desert, CA
Riverside Central Library, Government Documents, 381 Mission Inn Avenue, Riverside, CA
Colllege of the Desert Library, 43-500 Monterey Avenue, Palm Desert, CA

Coachella Branch Library, Coachella, CA
Lake Tamarisk Branch Public Library, 43880 Lake Tamarisk Drive, Desert Center, CA
Palm Springs Library, 300 S. Sunrise Way, Palm Springs, CA
San Bernardino County Library, Joshua Tree Branch, 6465 Park Boulevard, Joshua Tree, CA
San Bernardino Public Library, Feldheym Central Library, W. 6 Street, San Bernardino, CA
Riverside Community College, Martin Luther King Library, 4800 Magnolia Avenue, Riverside, CA
Rancho Mirage Public Library, 42520 Bob Hope Drive, Rancho Mirage, CA
Catherdral City, 33520 Date Palm Drive, Cathedral City, CA

Copies will be also be available at the following BLM and County offices:

BLM Desert District Office, 6221 Box Springs Boulevard, Riverside, CA
BLM Palm Springs-South Coast Resource Area, 63-500 Garnet, North Palm Springs, CA
County of Riverside, Planning Department, 4080 Lemon Street, 9th Floor, Riverside, CA
County of Riverside, Transportation and Land Management Agency, 46-209 Oasis Street, Room 209, Indio, CA

DATES: A sixty (60) day comment period has been established for review of the Draft EIS/EIR. Written comments on the draft EIS/EIR must be submitted or postmarked no later than September 10, 1996. Oral and/or written comments may also be presented at four public hearings to be held:

August 5, 1996, 6:00-9:00 p.m.--Lake Tamarisk Clubhouse, 26251 Parkview, Desert Center, CA
August 6, 1996, 4:00-7:00 p.m.--Palm Springs Convention Center, Springs Theater, 277N. Avenida Caballeros, Palm Springs, CA
August 7, 1996, 6:00-9:00 p.m.--Black Rock Visitor Center, 9800 Black Rock Canyon Road, Yucca Valley, CA
August 8, 1996, 4:00-7:00 p.m.--Riverside Municipal Auditorium, 3485 Mission Inn Avenue, Riverside, CA

ADDRESSES: Written comments on the document should be addressed to: Eagle Mountain Landfill and Recycling Center Project, Bureau of Land Management, 6221 Box Springs Boulevard, Riverside, California 92507.

FOR FURTHER INFORMATION CONTACT:
Joan Oxendine, California Desert District, 6220 Box Springs Boulevard, California 92507; phone (909) 697-5365.

Dated: July 3, 1996.
Henri R. Bisson,
District Manager.
[FR Doc. 96-17699 Filed 7-11-96; 8:45 am]
BILLING CODE 4310-40-M

The Contents entry for this article reads as follows:

Land Management Bureau
NOTICES
Environmental statements; availability, etc.:
Eagle Mountain Landfill and Recycling Center Project, CA, 36754

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DEPARTMENT OF THE INTERIOR
Bureau of Land Management
[CA-063-00-5440-ZBBB; CACA-30070; CACA-25594; CACA-31926]

Correction to End of Comment Period for Draft Environmental Impact Statement/Report for Eagle Mountain Landfill and Recycling Project, Riverside, CA

AGENCY: Bureau of Land Management, Desert District.

ACTION: Correction to end of comment period.

SUMMARY: The Bureau of Land Management's Notice of Availability for the Draft EIS for the Eagle Mountain Landfill Project, published in the Federal Register July 12, 1996, noted that the end of the written comment period was September 10, 1996. This date is incorrect; the correct date for the end of the written comment period is September 17, 1996.

Dated: July 23, 1996.
Alan Stein,
Acting District Manager.
[FR Doc. 96-19301 Filed 7-29-96; 8:45 am]
BILLING CODE 4310-40-M

The Contents entry for this article reads as follows:

Land Management Bureau
NOTICES
Environmental statements; availability, etc.:
Eagle Mountain Landfill and Recycling Center Project, CA; correction, 39663

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Appendix P
BLM Level I Contaminant Surveys

Appendix P
Bureau of Land Management

Level I Contaminant Surveys

This appendix contains the Level I Contaminant Surveys completed by the Bureau of Land Management (BLM) on lands associated with the proposed Eagle Mountain Landfill and Recycling Center Project (Project). All of these Surveys resulted in a finding of no evidence of hazardous substances or obvious signs of any effects of contamination on the Offered Lands, the Selected Lands, or the Townsite Reverter Lands. Upon completion of these Level I Surveys, the BLM recommended that no subsequent, more detailed investigations (i.e., Level II and Level III Surveys) be conducted to assess the potential for contamination. The Surveys and their findings are summarized below. These surveys and the other public health and safety issues are discussed in detail in the Draft EIS/EIR for the proposed Project (Section 3.2 and 4.2).

BLM Contaminant Survey Checklist for the Selected Public Lands (September 24 and 25, 1992)

In September 1992, the BLM completed a Level I Contaminant Survey Checklist (Serial Number CA 30070 FD) for approximately 3,512 acres of publicly owned lands surrounding the Eagle Mountain Mine operation that the BLM proposed to transfer to Kaiser. These lands are referred to as the Selected Federal Lands. The purpose of the Level I Survey was to review these lands for indications of the potential presence of hazardous substances.

The Level I checklist concluded that "No evidence or recorded information was found to indicate that any hazardous substance was stored for one year or more or disposed of or released on the property."

BLM Contaminant Survey Checklist for the Offered Private Lands (October 19, 1992)

On October 19, 1992, the BLM completed a Level I Contaminant Survey Checklist (Serial Number CA 30070 PT) for approximately 2, 849 acres of private land owned by Kaiser that are proposed as part of the Project to be transferred to the Federal Government for administration by the BLM. The lands are located south of Highway 10 in the Chuckwalla Bench and are referred to as the "Offered Private Lands." The purpose of this Survey was to review these lands for indications of the potential presence of hazardous substances. The Level I Survey identified no potential hazardous substances either on or in the vicinity of the Offered Private lands and concluded that "[t]he above described lands have been examined in accordance with Section 120(h) of CERCLA. No evidence of recorded information was found to indicate that any hazard substance was stored for one year or more or disposed of or released on the property."

Followup BLM Contaminant Survey Checklist for the Selected Federal Lands (February 6, 1996)

Pursuant to CERCLA, on February 6, 1996, the BLM completed another Level I Contaminant Survey Checklist (Serial Number CA 30070, CA Office Code CA-066) for the Selected Federal Lands. The Survey concluded that "[t]he above described lands have been examined in accordance with Section 120(h) of CERCLA. No evidence of recorded information was found to indicate that any hazard substance was stored for one year or more or disposed of or released on the property."

BLM Contaminant Survey Checklist for the Townsite Reverter (February 6, 1996)

On February 6, 1996, the BLM completed a Level I Survey Checklist (Casefile # CA-30070, CA Office Code CA-066) for the lands encumbered by the Federal reversionary interest being proposed for exchange. The reversionary interest is located on lands that were previously conveyed to the exchange proponent under U.S. Patent # 1153422 for a millsite and campsite (i.e., Townsite). The Level I Survey identified no potential hazardous substances either on or in the vicinity of the Townsite reverter lands and concluded that "[t]he above described lands have been examined in accordance with Section 120(h) of CERCLA. No evidence of recorded information was found to indicate that any hazard substance was stored for one year or more or disposed of or released on the property."

Followup BLM Contaminant Survey Checklist for the Offered Private Lands (April 5, 8, 12, 1996)

On April 5, 8, and 12, 1996, the BLM completed another Level I Contaminant Survey Checklist (Serial Number CA 30070, CA Office Code CA-066) for the Offered Private Lands. The Survey concluded that "no contaminants are present on this real estate, and there are no obvious signs of any effects of contamination."

Other Contaminant Investigations and Findings

In addition to the BLM Surveys, other investigations were conducted by the Department of Toxic Substances Control (DTSC) and the U.S. Environmental Protection Agency (EPA). These investigations and the other public health and safety issues are discussed in detail in the Draft EIS/EIR for the proposed Project (Section 3.2 and 4.2). The DTSC and EPA investigations are summarized below.

Department of Toxic Substances Control Complaint Inspection and Sampling Report

In response to a citizen complaint, the DTSC conducted an investigation and prepared the Complaint Inspection and Sampling Report that concluded "the Department cannot find evidence to support the allegations that hazardous waste was disposed at the facility in sufficient quantities or with toxic characteristics so as to noticeably impact the environment, or to warrant a formal enforcement action against the facility." (DTSC, Complaint Inspection and Sampling Report, April 1994). In response to supplemental information provided by the complainant and in response to minor editing changes in the report, the DTSC prepared an addendum (DTSC, Complaint Inspection and Sampling Report, Addendum, 1994) that states "there was no evidence found to support the allegations that hazardous materials were illegally disposed. The site does not currently threaten the environment."

U.S. Environmental Protection Agency Preliminary Assessment

The EPA, Region IX, conducted a Preliminary Assessment (PA) in August, 1994, to determine if the proposed Project site posed a sufficient potential public health or environmental risk to be placed on the National Priorities List for further investigation and remedial response under CERCLA. The results of the PA concluded that the no further action under CERCLA was warranted.

Acquisition or (Disposal) (Exchang
(Circle One)
Serial CA30070 FD (Public Lands)
CA Office Code CA-066.60

California BLM
Level I Survey
Contaminant Survey Checklist
of Proposed Real Estate Acquisitions and Disposals

INSTRUCTIONS: Check for each category. Explain briefly where something other than "No", "None," or "Not Applicable" is checked. Discuss whether a Level II or III Survey will be recommended. Describe the distance if nearby is checked and whether there is a known potential pathway for contamination on site. Attach a legal description of the real estate property covered by this Survey if several parcels are covered.

A. Background Information

Project Name Eagle Mountain County Riverside State California

Legal Description See "Selected Public Lands" and map attached
Landowner Name Public Lands District CDD RA Palm Springs-South
Date of Survey 9/24-25/92

B. Site Inspection Screen: On-site and nearby	ONSITE	NEARBY	NONE
1. Dump sites especially with drums, containers (Read labels if possible; do not open or handle! If no labels, note identifying characteristics)	X		
2. Other debris potentially causing problems (e.g. paint cans, industrial waste, mining wastes, etc)	X		
3. Fill material: possible cover for dumps	X		
4. Unusual chemical odors		X	
5. Storage tanks: petroleum products, pesticides, etc.		X	
6. Buildings: chemical storage, equipment repair, solvents, asbestos containing materials	X		
7. Vegetation different from surrounding for no apparent reason, e.g. bare ground			X
8. "Sterile" or modified water bodies			X
9. Oil seeps, stained ground, discolored stream banks			X
10. Oil slicks on water, unusual colors in water			X
11. Spray operation base: air strip, equipment parking area			X
12. Machinery repair areas		X	
13. Pipelines; major electrical equipment		X	
14. Oiled or formerly oiled roads	X		
15. Evidence of leakage around electric transmission lines: pole mounted transformers, pad mounted transformers			X

*See NOTE

*NOTE: KAISER IS SIGNING A WAIVER REGARDING ANY POTENTIAL HAZARDS OR HAZARDOUS MATERIALS WHICH IS ATTACHED TO THIS LEVEL I CONTAMINANT SURVEY

C. Record Searches (Coordinate with Realty, title search, others as appropriate).

1. Past uses which might indicate potential problems of site (CIRCLE any that are applicable).

   Manufacturing, service stations, dry cleaning, air strip, (pipelines), (rail lines), facilities with large electrical transformers or pumping equipment, petroleum production, landfills, scrap metal, auto, or battery recycling, military, labs, wood preserving, agricultural chemicals, other describe: See Note on first page — None *

2. Nearby land uses, especially upstream or upgradient, or that might have had waste to dump at site. Identify: dump/storage — None *

3. Known contaminant sites in vicinity: NPL, state sites, candidate sites (check with EPA; State EPA counterpart). — Yes ___ No X

4. Interviews on past use: owners, neighbors, county agents and any appropriate Federal authorities: Problems? — Yes * No ___

5. Agricultural drainage history: surface, subsurface drains. — Yes ___ No X

D. A Federal agency has notified the Department under section 120(h) of CERCLA (Superfund) of past or current presence of a hazardous substance. Not Applicable ___ — Yes ___ No X

E. A non-Federal entity has documented hazardous materials on or near the site. Not Applicable___ . — Yes ___ No X

F. A Level II study is recommended. — Yes ___ No *
   A Level III study is recommended. — Yes ___ No *

*See Note on first page.

G. Disposal Certification Kaiser Eagle Mountain, Inc. has signed a waiver attached to this report.

The above described lands have been examined in accordance with Section 120(h) of SAR No evidence or recorded information was found to indicate that any hazardous substanc was stored for one year or more or disposed of or released on the property.

Field Personnel

Signed Verla J. Harle Print Name Verla J. Harle

Date 2/9/93 Title Realty Specialist

Area Manager

Russell Goldsberry ✓ Concur ____ Do Not Concur 2/10/93 Date

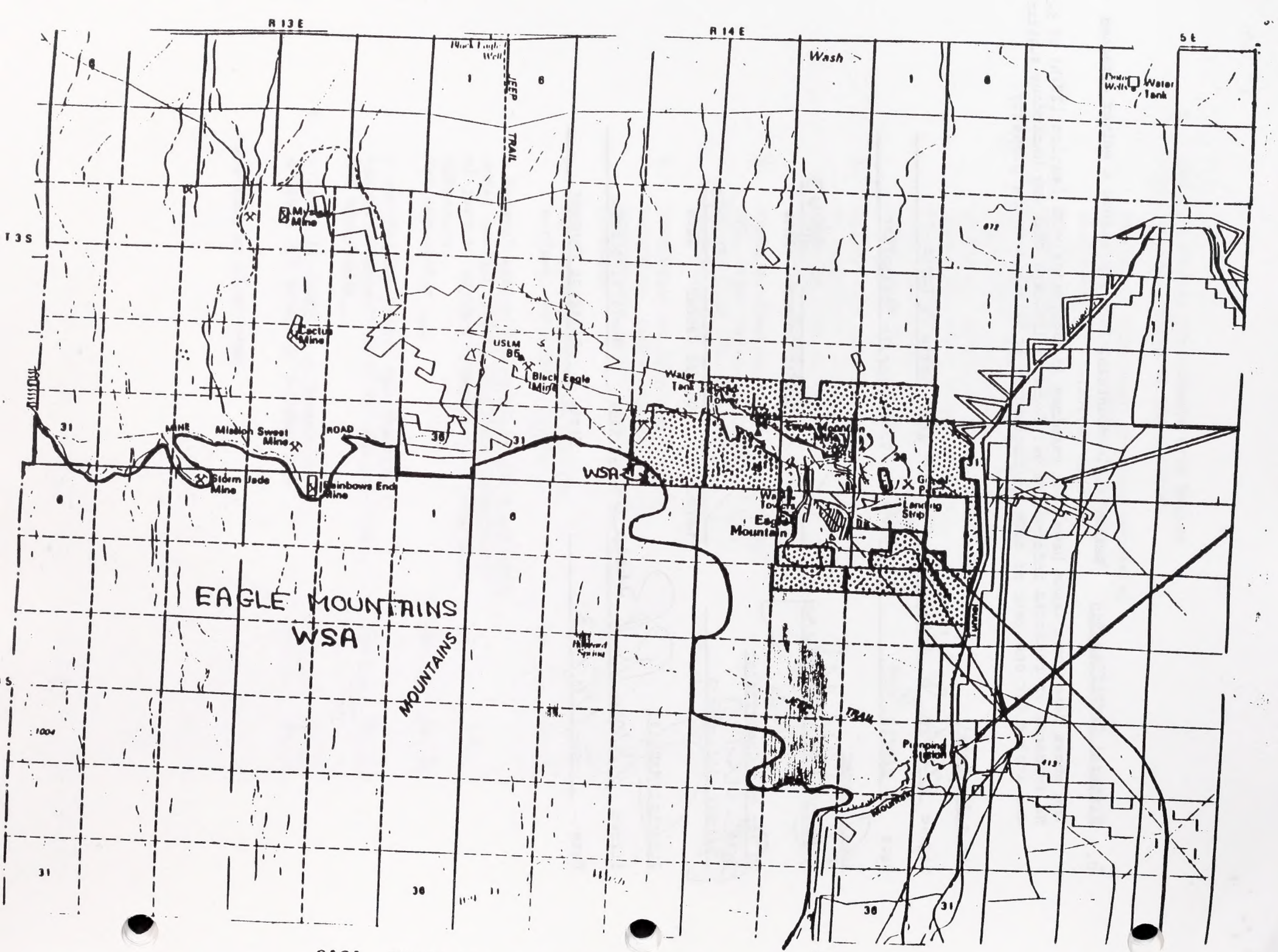
DO Haz Mat Coordinator

John W. Kelly ✓ Concur ____ Do Not Concur 2/16/93 Date

District Manager

Signed Henri R Bisson Print Name Henri R. Bisson

Date 2/16/93 Title District Manager



CACA 30070 FD - SELECTED PUBLIC LANDS

Selected Public Lands

All remaining public lands located in:

San Bernardino Meridian
Riverside County, California

T. 3 S., R. 14 E.

Sec. 25: Lots 5 and 6, SW¼, W½SE¼
Sec. 26: SW¼, SW¼SE¼, E½SE¼
Sec. 27: Lots 1 and 2, SE¼, N½SW¼
Sec. 28: Lot 9
Sec. 33: Lots 1, 2, 4 and 5, S½NE¼, E½NW¼, E½SW¼, SE¼
Sec. 34: Lots 1-7, SE¼SE¼, W½SE¼, SW¼
Sec. 35: Lots 1-4 and 9, NE¼NW¼, N½NE¼
Sec. 36: Lot 12

T. 3 S., R. 15 E.

Sec. 31: Lots 5, 10-14, 17-19

T. 4 S., R. 14 E.,

Sec. 1: Lots 8-11, SW¼SE¼, E½SE¼SW¼, E½NW¼SE¼
Sec. 2: Lots 7-9, S½SW¼, SW¼SE¼, W½SE¼SE¼
Sec. 11: Lots 1-4
Sec. 12: Lots 1-4

T. 4 S., R. 15 E.,

Sec. 6: Lots 4, 5, 8-11
Sec. 7: Lots 4-10, 12 and 13

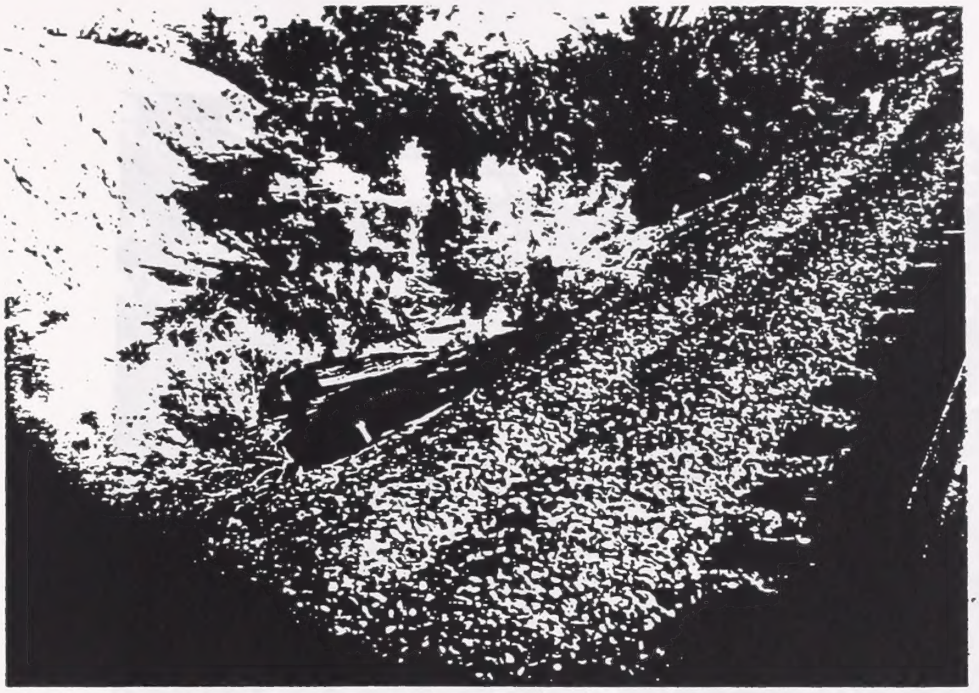
These selected lands total 3,512.47 acres, more or less.

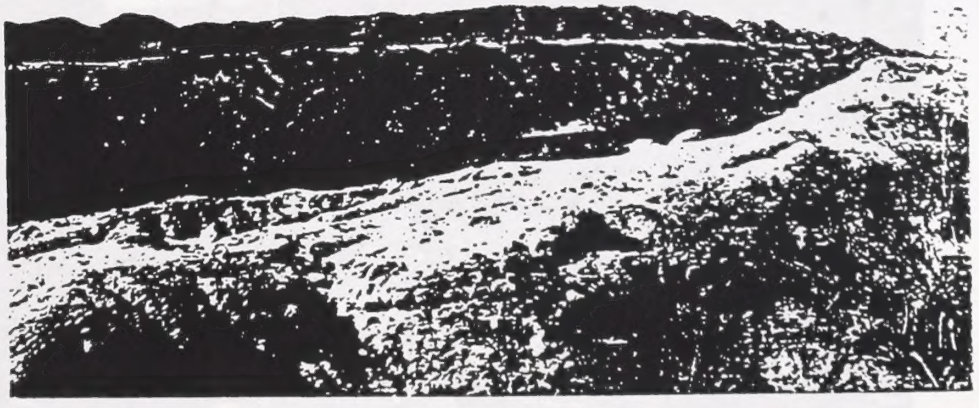
T 3 S., R. 14 E.



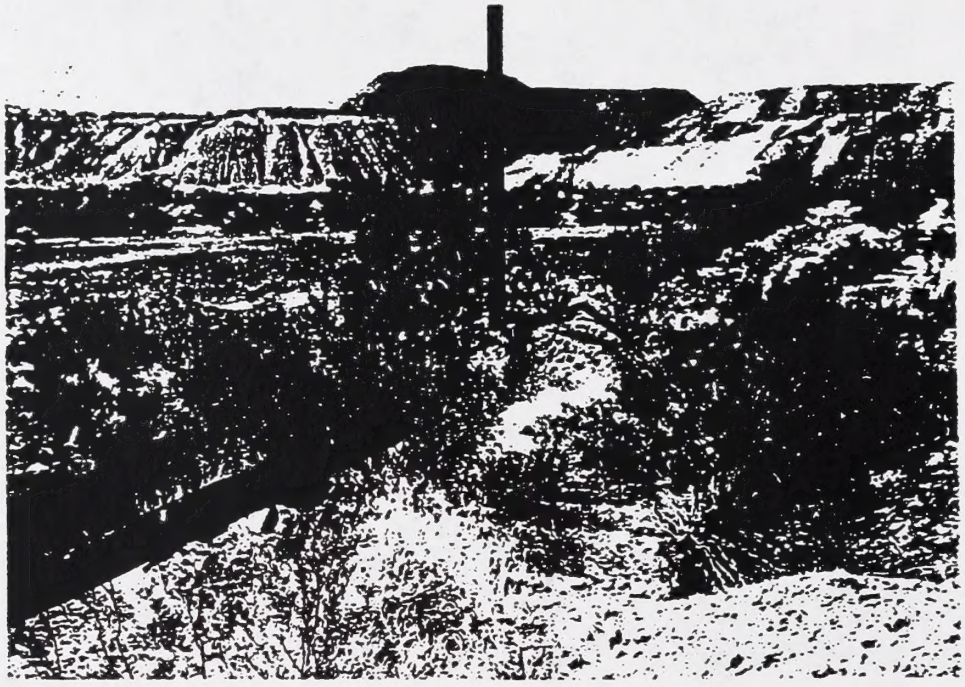


T. 3 S., R. 14 E.

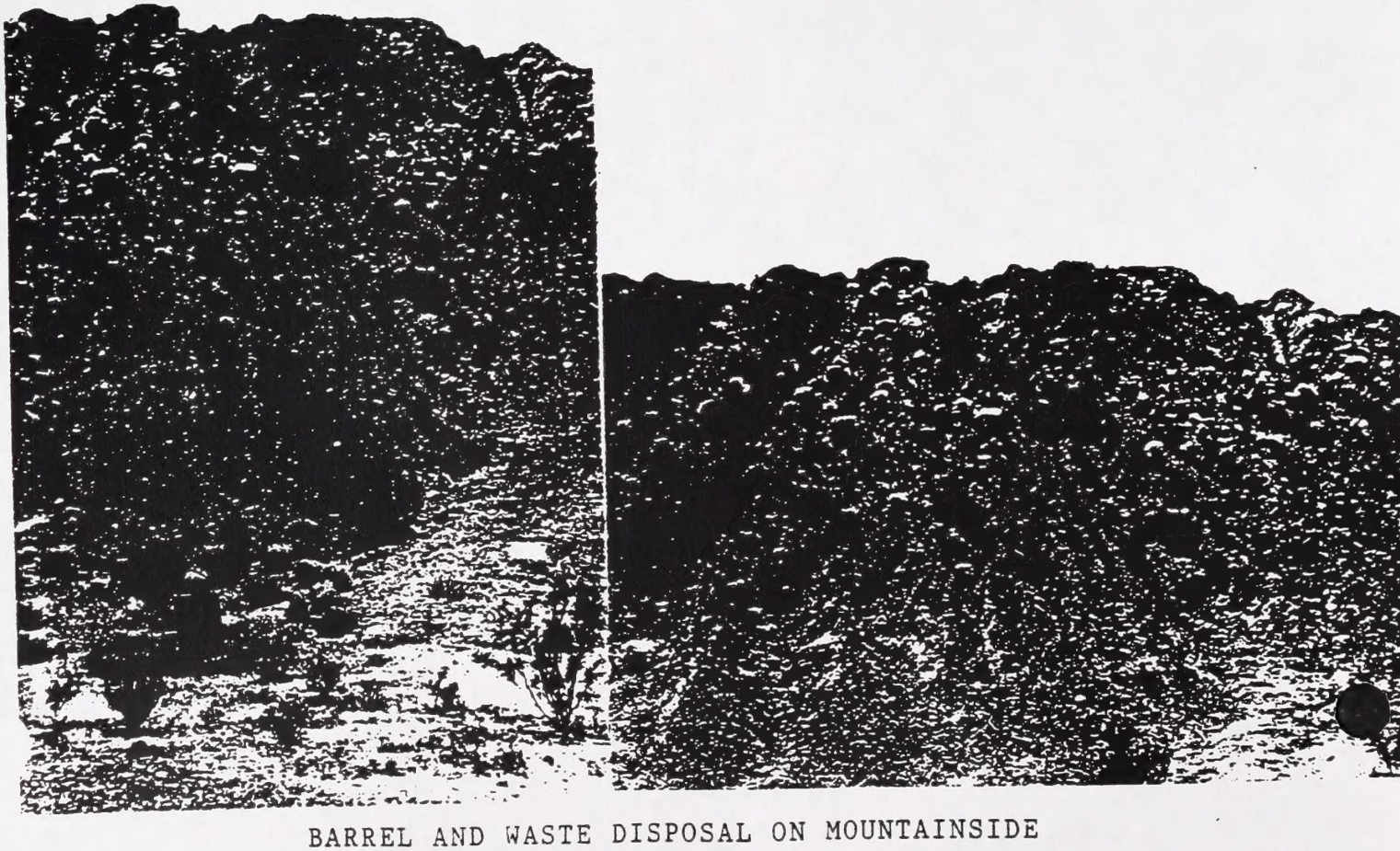




T. 3 S., R. 15 E., SEC. 31



BROKEN WATER PIPELINE



BARREL AND WASTE DISPOSAL ON MOUNTAINSIDE

T. 3 S., R. 15 E., SEC. 31



COVERED BARRELS, NOT EMPTY

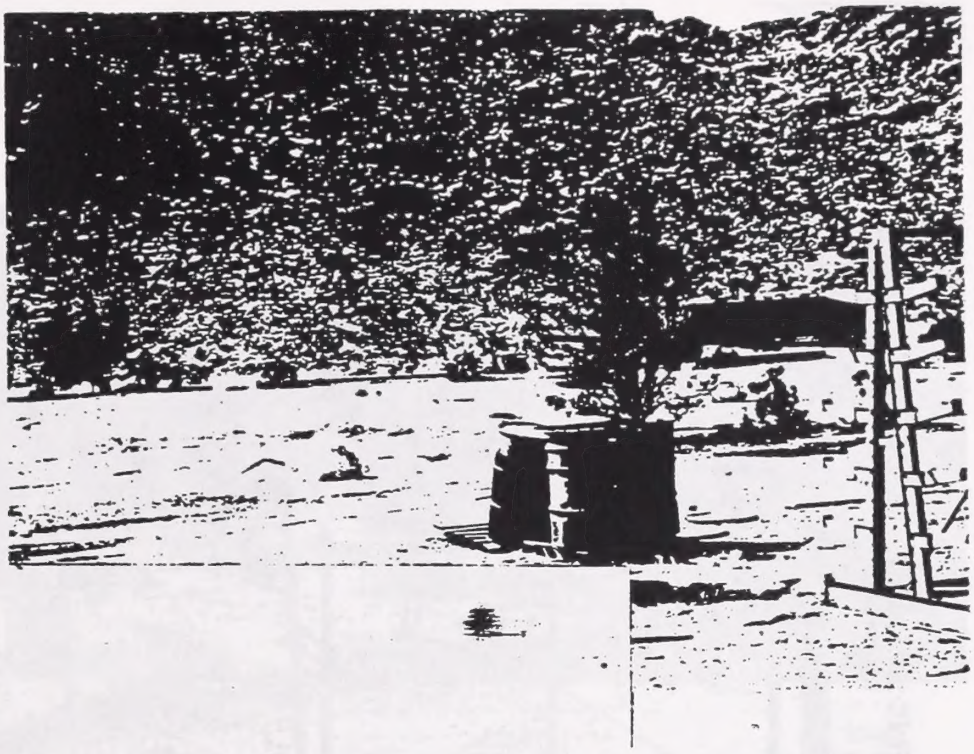
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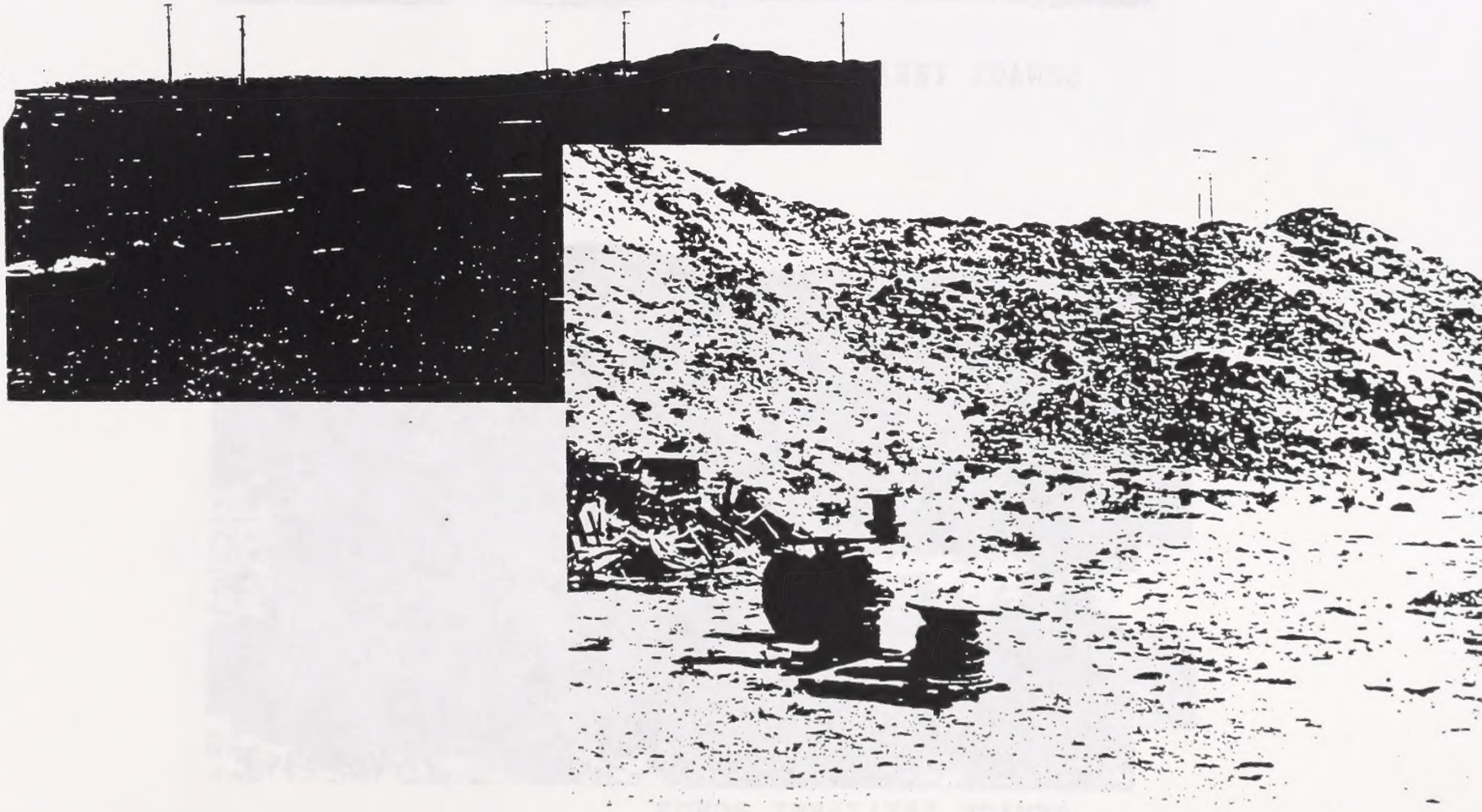




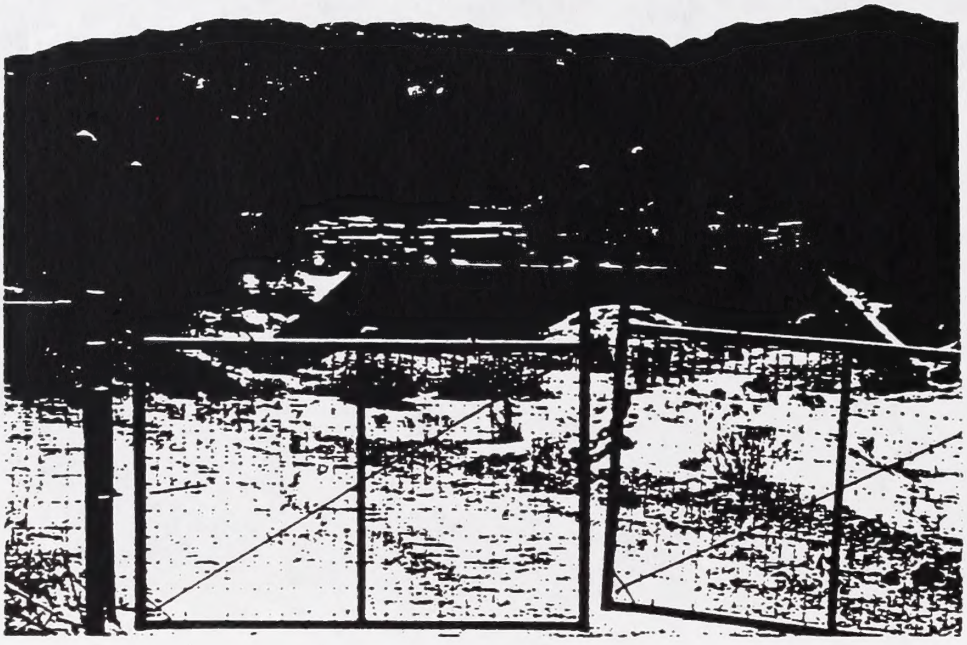
PANORAMIC VIEW OF SEC. 2

T. 4 S., R. 14 E.





BARRELS OF UNKNOWN MATERIAL, TIRES, RAILROAD SPUR



SEWAGE TREATMENT PONDS



SEWAGE TREATMENT PONDS



SEWAGE TREATMENT PONDS



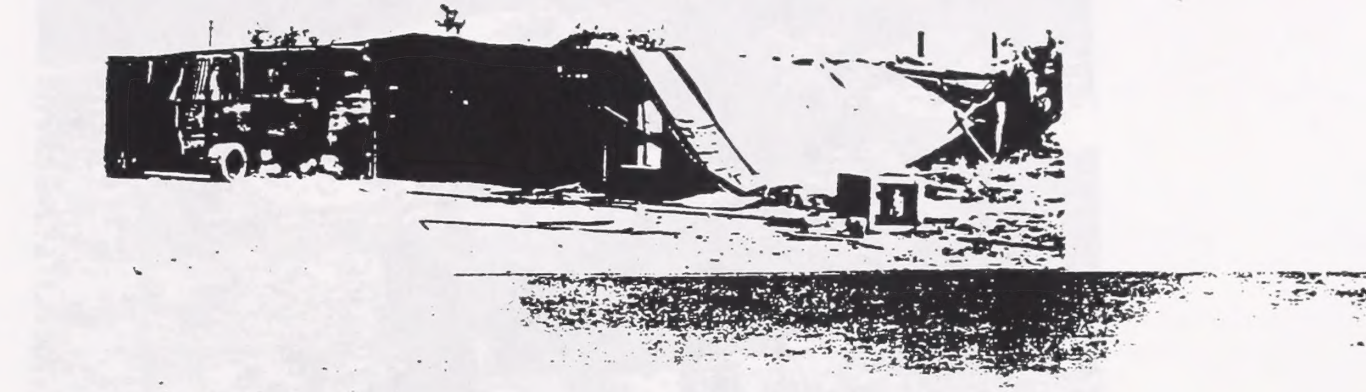
T. 4 S., R. 14 E., SEC. 12





OLD 4-H, SADDLE CLUB AND RODEO GROUNDS

T. 4 S., R. 14 E., SEC. 12





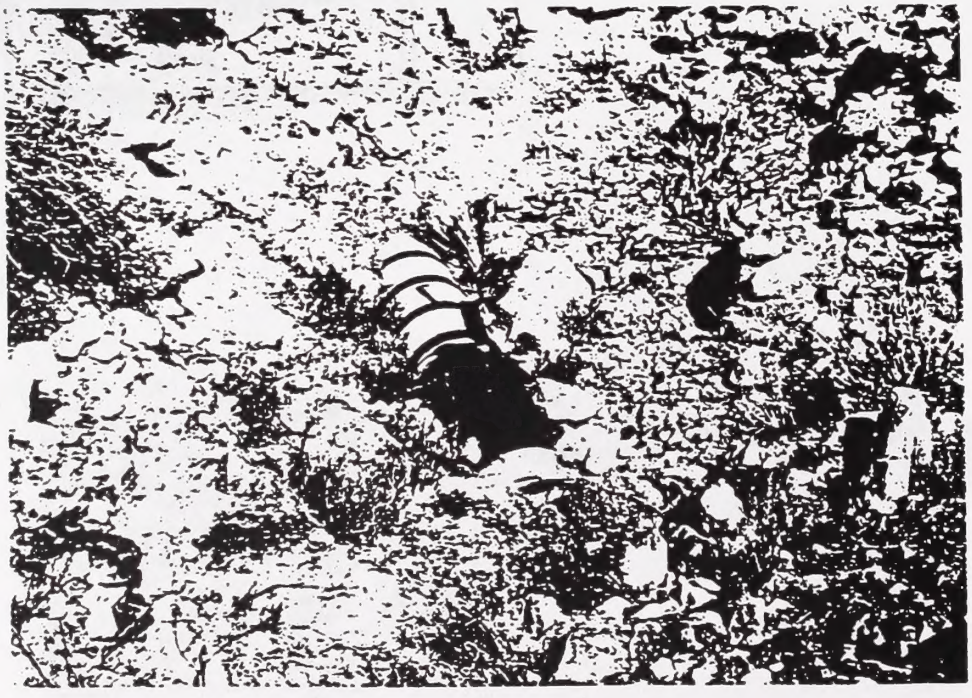


POSSIBLY A DRUG LAB IN SEC. 12 AT ONE TIME

T. 4 S., R. 15 E., SEC. 6

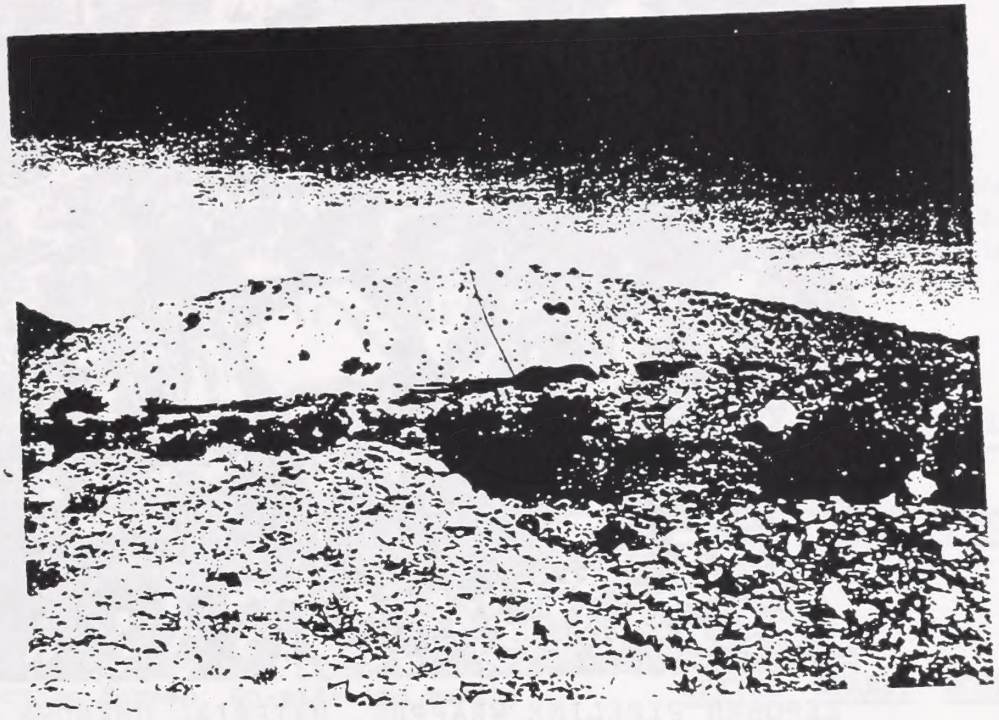


EMPTY DRUM, NO MARKINGS

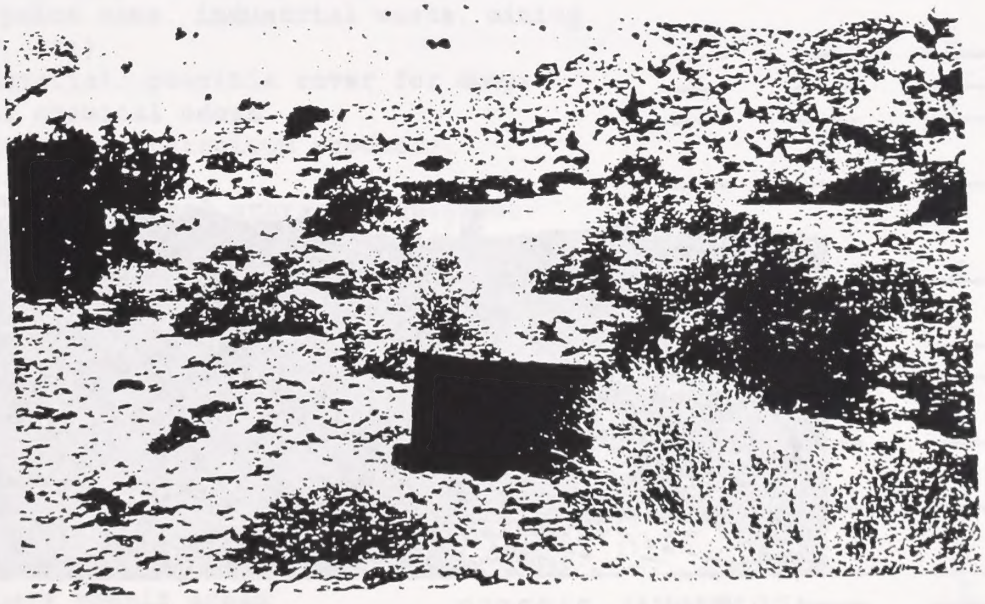


PIPELINE

T. 4 S., R. 15 E., SEC. 6

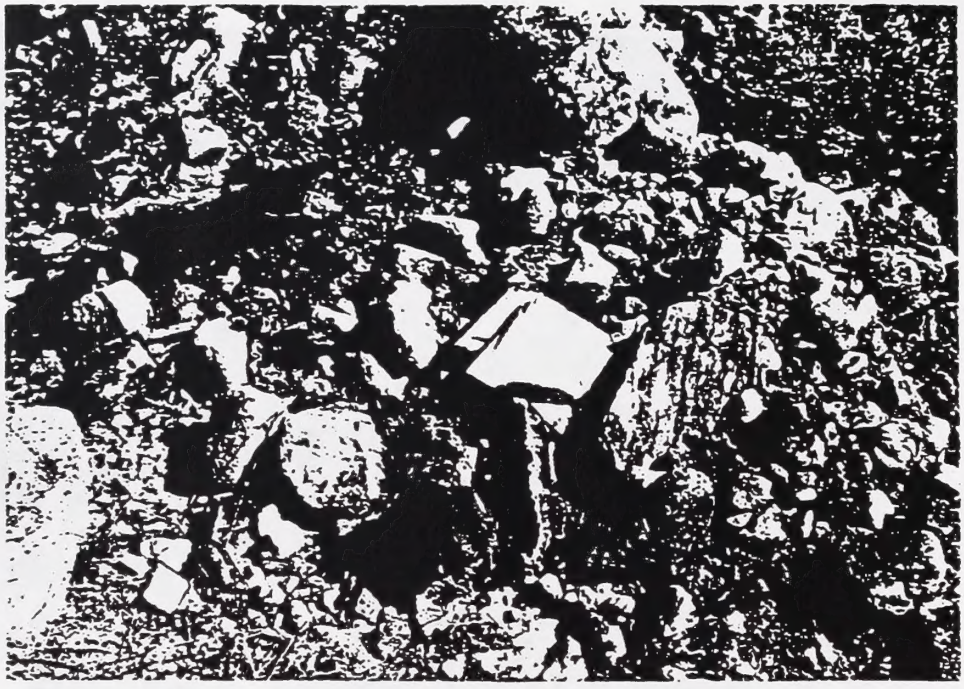


MILL TAILINGS WITH PIPE



ANOTHER DRUM

T. 4 S., R. 15 E., SEC. 6



EXPOSED PIPELINE WRAPPER, MATERIAL UNKNOWN



ADDITIONAL BARRELS

Acquisition or (Disposal) (Exchange)
(Circle One)
Serial CA 30070 PT (Kaiser Land)
CA Office Code CA-066.60

California BLM
Level I Survey
Contaminant Survey Checklist
of Proposed Real Estate Acquisitions and Disposals

INSTRUCTIONS: Check for each category. Explain briefly where something other than "No", "None," or "Not Applicable" is checked. Discuss whether a Level II or III Survey will be recommended. Describe the distance if nearby is checked and whether there is a known potential pathway for contamination on site. Attach a legal description of the real estate property covered by this Survey if several parcels are covered.

A. Background Information

Project Name Eagle Mountain County Riverside State California

Legal Description See "Offered Private Lands" and map attached
Landowner Name Kaiser District CDD RA PS-SC
Date of Survey 10/19/92

B. Site Inspection Screen: On-site and nearby	ONSITE	NEARBY	NONE
1. Dump sites especially with drums, containers (Read labels if possible; do not open or handle! If no labels, note identifying characteristics)	___	___	X
2. Other debris potentially causing problems (e.g. paint cans, industrial waste, mining wastes, etc)	___	___	X
3. Fill material: possible cover for dumps	___	___	X
4. Unusual chemical odors	___	___	X
5. Storage tanks: petroleum products, pesticides, etc.	___	___	X
6. Buildings: chemical storage, equipment repair, solvents, asbestos containing materials	___	___	X
7. Vegetation different from surrounding for no apparent reason, e.g. bare ground	___	___	X
8. "Sterile" or modified water bodies	___	___	X
9. Oil seeps, stained ground, discolored stream banks	___	___	X
10. Oil slicks on water, unusual colors in water	___	___	X
11. Spray operation base: air strip, equipment parking area	___	___	X
12. Machinery repair areas	___	___	X
13. Pipelines; major electrical equipment	___	___	X
14. Oiled or formerly oiled roads	___	___	X
15. Evidence of leakage around electric transmission lines: pole mounted transformers, pad mounted transformers	___	___	X

C. Record Searches (Coordinate with Realty, title search, others as appropriate).

1. Past uses which might indicate potential problems of site (CIRCLE any that are applicable).

   Manufacturing, service stations, dry cleaning, air strip, pipelines, (rail lines) facilities with large electrical transformers or pumping equipment, petroleum production, landfills, scrap metal, auto, or battery recycling, military, labs, wood preserving, agricultural chemicals, other describe: _____ None X

2. Nearby land uses, especially upstream or upgradient, or that might have had waste to dump at site. Identify: _____ None X

3. Known contaminant sites in vicinity: NPL, state sites, candidate sites (check with EPA; State EPA counterpart). Yes ___ No X

4. Interviews on past use: owners, neighbors, county agents and any appropriate Federal authorities: Problems? Yes ___ No X

5. Agricultural drainage history: surface, subsurface drains. Yes ___ No X

D. A Federal agency has notified the Department under section 120(h) of CERCLA (Superfund) of past or current presence of a hazardous substance.
Not Applicable X Yes ___ No ___

E. A non-Federal entity has documented hazardous materials on or near the site. Yes ___ No ___
Not Applicable X .

F. A Level II study is recommended. Yes ___ No X
A Level III study is recommended. Yes ___ No X

G. Disposal Certification

The above described lands have been examined in accordance with Section 120(h) of SA
No evidence or recorded information was found to indicate that any hazardous substanc
was stored for one year or more or disposed of or released on the property.

Field Personnel

Signed Verla J. Harle Print Name Verla J. Harle

Date 2/9/93 Title Realty Specialist

Area Manager

Russell Kaldenberg X Concur ____ Do Not Concur 2/10/93 Date

~~DO Haz Mat Coordinator~~

John W Fell X Concur ____ Do Not Concur 2/16/93 Date

District Manager

Signed Henri R Bisson Print Name Henri R. Bisson

Date 2/16/93 Title District Manager

Offered Private Lands

San Bernardino Meridian
Riverside County, California

T. 5 S., R. 14 E.,

Sec. 27: N½, N½S½.

T. 6 S., R. 14 E.,

Sec. 16: W½W½.
Sec. 21: W½.

T. 7 S., R. 12 E.,

Sec. 35: Described by metes and bounds (*)
Sec. 36: N½SW¼, SE¼NW¼, S½NE¼.

T. 7 S., R. 13 E.,

Sec. 31: Described by metes and bounds (*)

T. 7 S., R. 14 E.,

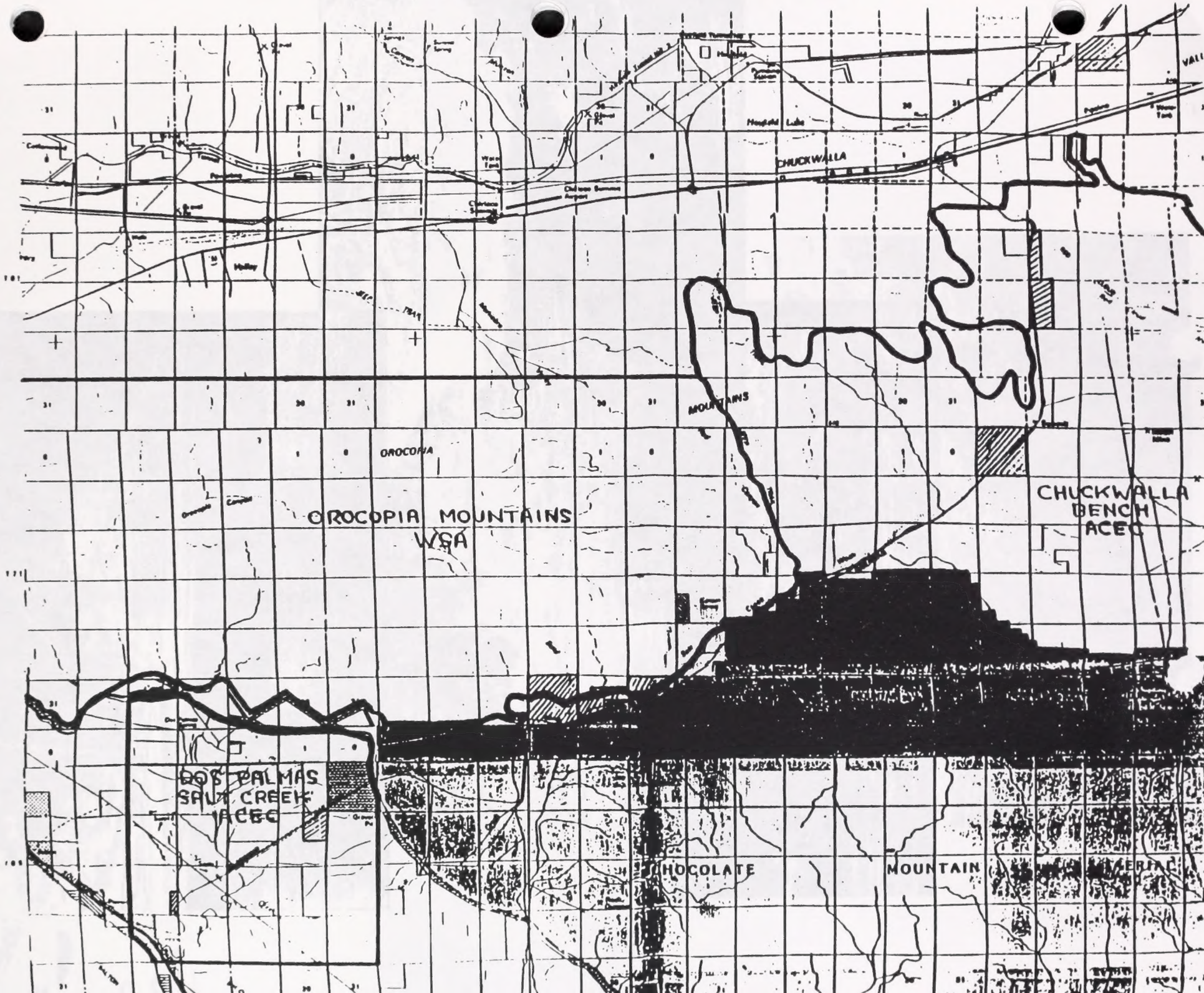
Sec. 5: All.

T. 8 S., R. 11 E.,

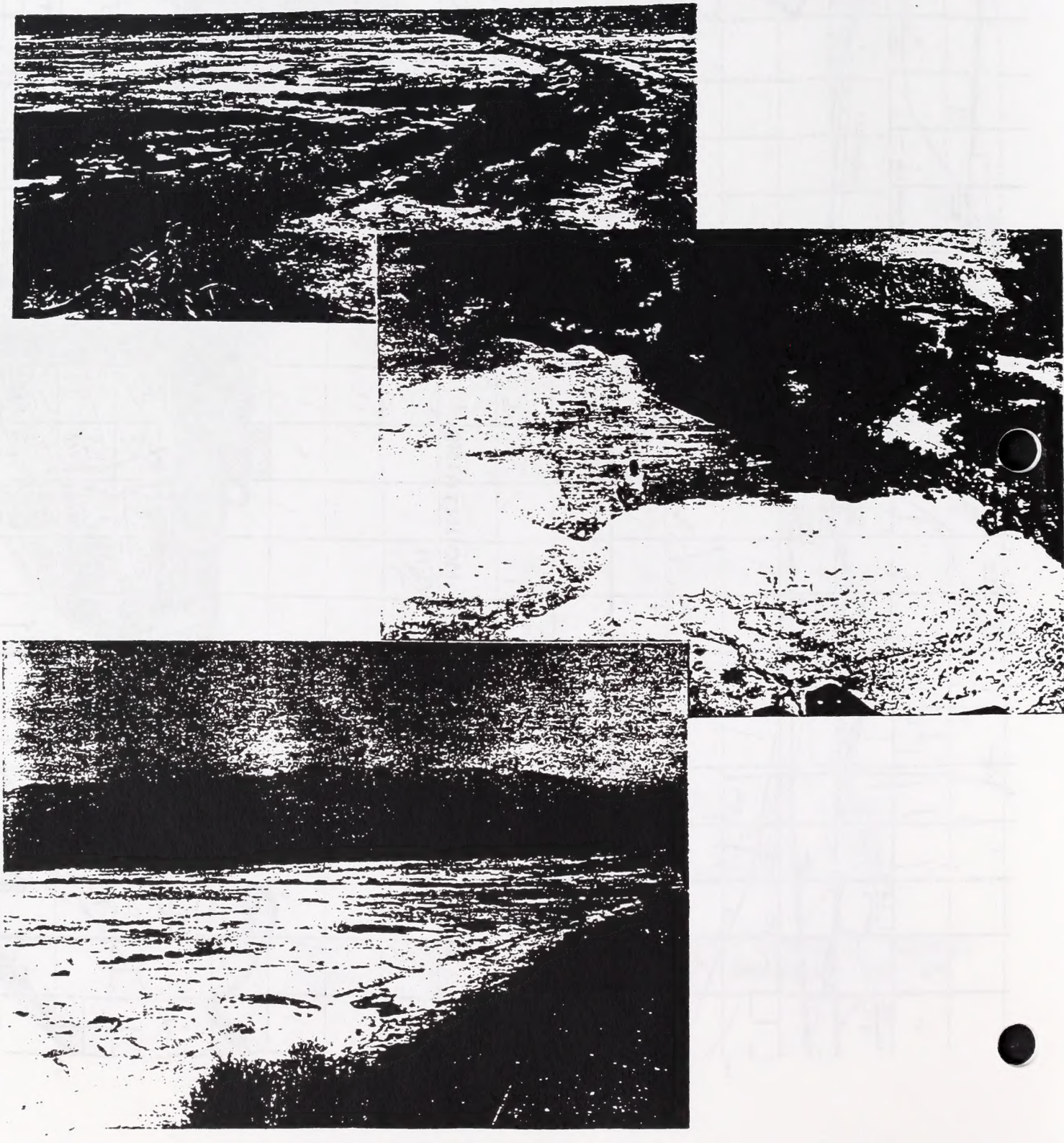
Sec. 13: NE¼
Sec. 21: E½E½SE¼
Sec. 23: Described by metes and bounds

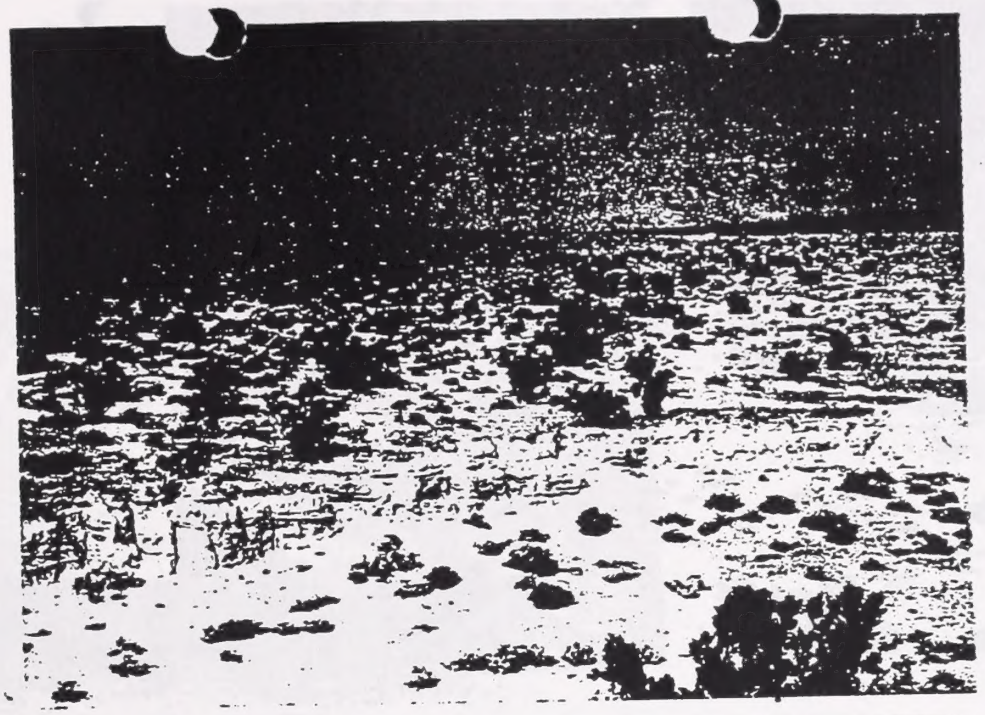
(*) Only those lands owned by Kaiser Steel Resources within these legal descriptions.

These offered private lands total 2,849.20 acres, more or less, subject to a 200' easement for an existing railroad.


CHUCKWALLA
OROCOPIA
MOUNTAINS
OROCOPIA MOUNTAINS
WSA
CHUCKWALLA
BENCH
ACEC
DOS PALMAS
SALT CREEK
ACEC
CHOCOLATE
MOUNTAIN

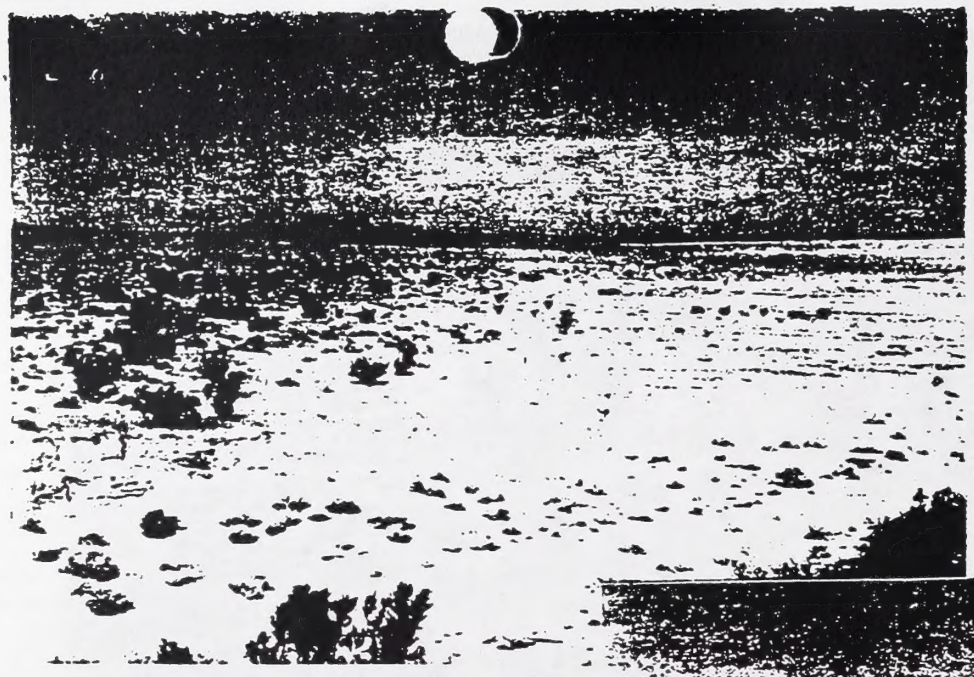
KAISER LANDS

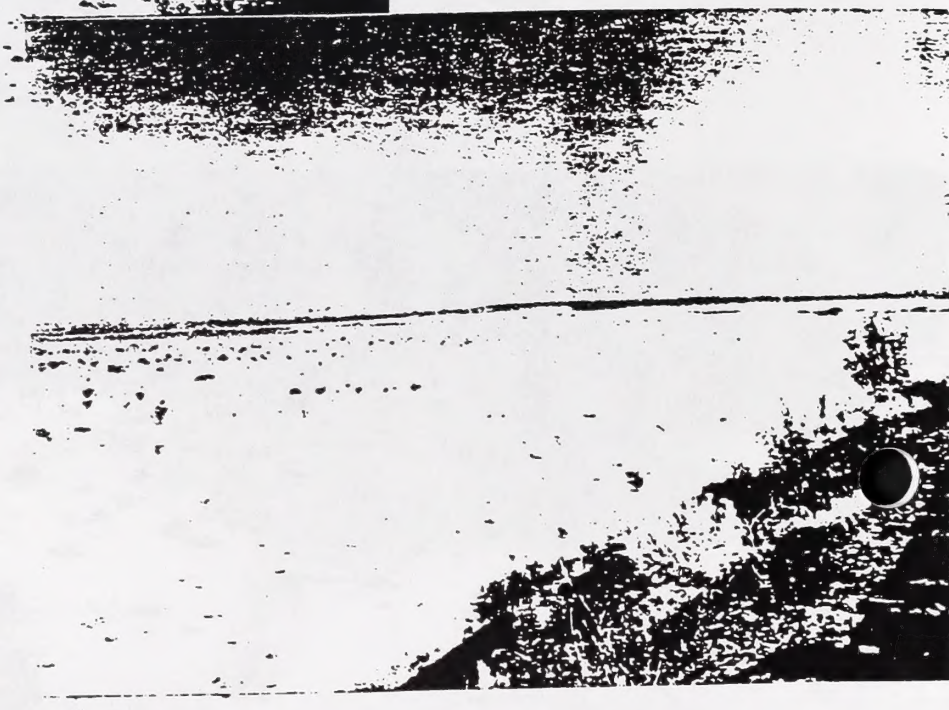




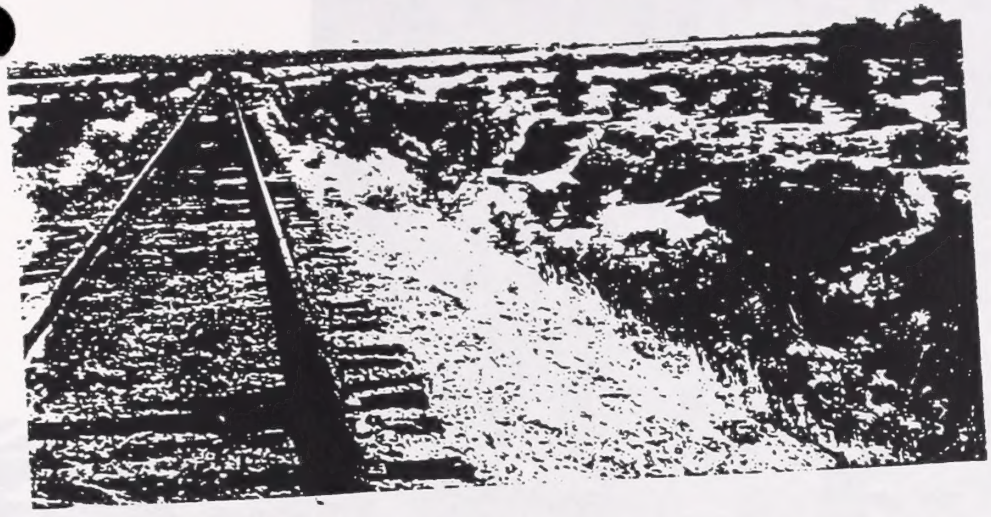




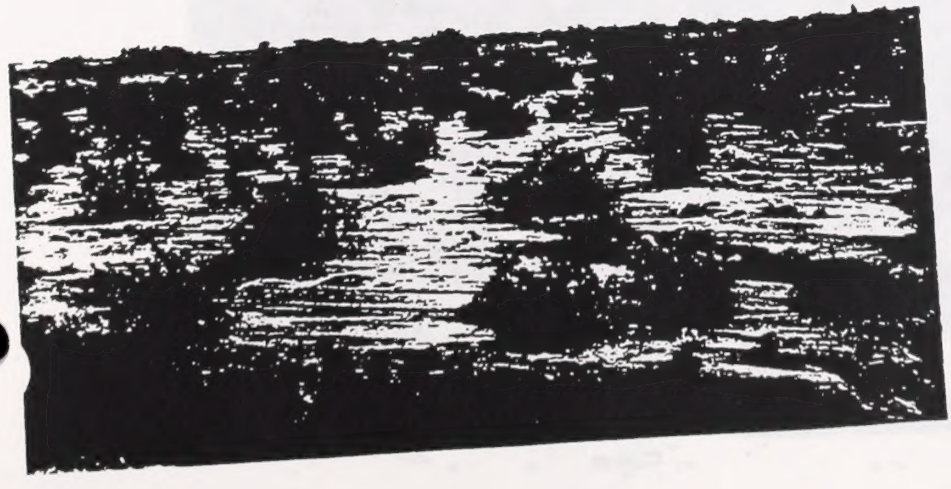


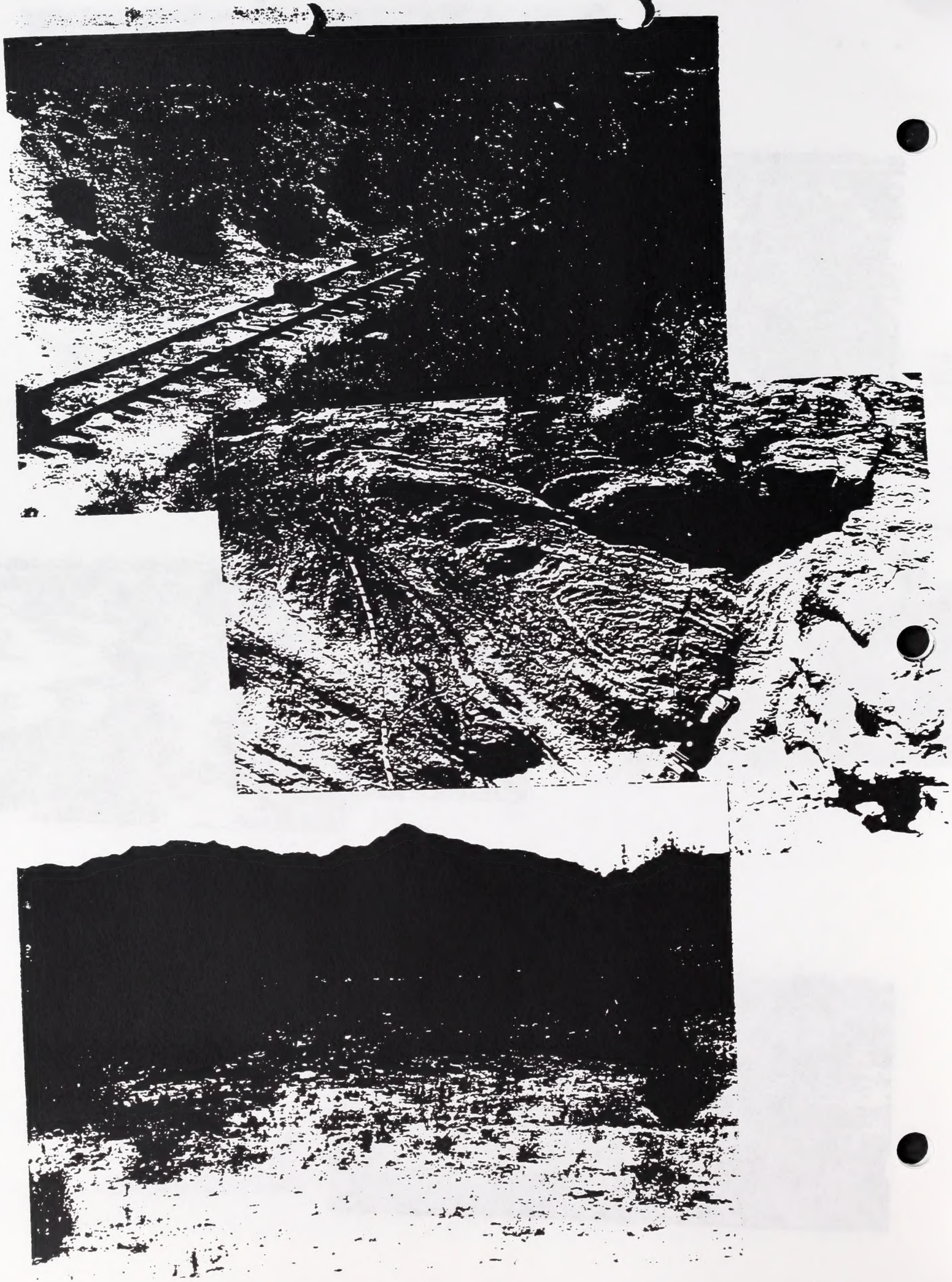


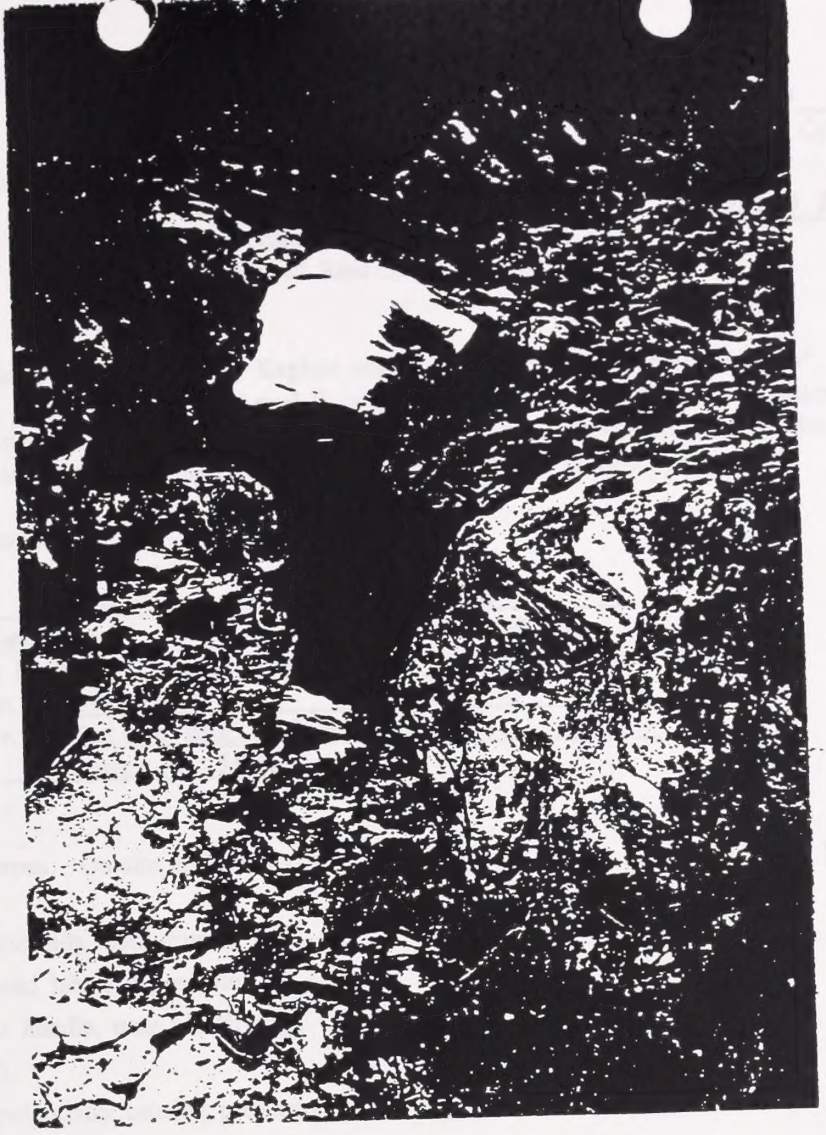














DISPOSAL

Casefile # CA-30070

CA Office Code CA-066

California BLM - Level I Survey
Contaminant Survey Checklist
of Proposed Real Estate Disposals

Selected Federal Lands

INSTRUCTIONS: Check for each category. Explain briefly where something other than "No", "None", or "Not Applicable" is checked. Discuss whether a Level II or III Survey will be recommended. Describe the distance if nearby is checked and whether there is a known potential pathway for contamination on site. Attach a legal description of the real estate property covered by this Survey if several parcels are covered.

A. Background Information:

Project Name: Eagle Mountain Land Exchange
County of Riverside, **State of California**
California Desert District - Palm Springs **Resource Area**
Legal Description: Attached
Landowner Name: Kaiser Eagle Mountain, Inc.
Date of Survey: February 6, 1996

B. Site Inspection Screen: On-site and nearby	ONSITE	NEARBY	NONE
1. Dump sites especially with drums, containers. (Read labels if possible; do not open or handle, note identifying characteristics).	___	___	X
2. Other debris potentially causing problems (e.g. paint cans, industrial waste, mining wastes, etc.).	___	___	X
3. Fill material: possible cover for dumps.	___	___	X
4. Unusual chemical odors.	___	___	X
5. Storage tanks: petroleum products, pesticides, etc.	___	X	___
6. Buildings: chemical storage, equipments, repair, solvents, asbestos containing materials	___	___	X
7. Vegetation different from surrounding for no apparent reason, e.g. bare ground.	___	___	X
8. "Sterile" or modified water bodies.	___	___	X
9. Oil seeps, stained ground, discolored stream banks.		___	X
10. Oil slicks on water, unusual color in water.	___	___	X
11. Spray operation base: air strip, equipment parking area.	___	___	X
12. Machinery repair areas	X	___	___
13. Pipelines: major electrical equipment.	___	___	X
14. Oiled or formerly oiled roads.	___	___	X
15. Evidence of leakage around electric transmission lines: pole mounted transformers, pad mounted transformers.	___	___	X

C. Record Searches (coordinate with Realty, title search, others as appropriate).

1. Past uses which might indicate potential problems of site (Circle any that are applicable).
   Manufacturing, service stations, dry cleaning, air strip, pipelines, rail lines, facilities with large electrical transformers or pumping equipment, petroleum production, landfills, scrap metal, auto, or battery recycling, military, labs, wood preserving, agricultural chemicals, other describe:
   Mining Operations None_____

2. Nearby land uses, especially upstream or upgradient, or that might have had waste to dump at site. Identify:
   _____ None **X**

3. Known contaminant sites in vicinity: NPL, State sites, candidate sites (check with EPA; State EPA counterpart). Yes____ No **X**

4. Interviews on past use: owners, neighbors, county agents and any appropriate Federal authorities: Problems? Yes____ No **X**

5. Agricultural drainage history: surface, subsurface drains. Yes____ No **X**

D. A Federal agency has notified the Department under Section 120(h) of CERCLA (Superfund) of past or current presence of a hazardous substance.
   Not Applicable _____ Yes____ No **X**

E. A non-Federal entity has documented hazardous materials on or near the site.
   Not Applicable _____ Yes____ No **X**

F. A Level II study is recommended. Yes____ No **X**
   A Level III study is recommended. Yes____ No **X**

G. Disposal Certification:

The above described lands have been examined in accordance with Section 120(h) of CERCLA. No evidence of recorded information was found to indicate that any hazardous substance was stored for one year or more or disposed of or released on the property.

Field Personnel:

Signed: _____ Name: Richard Waggoner

Date: 5/22/96 Title: Realty Specialist

Area Manager:

Julia Dougan ✓ 5/29/96

Julia Dougan Concur Not Concur Date

District Office Haz-Mat Coordinator:

_____ ✓ 06/04/96

John Key Concur Not Concur Date

H. Designated Approving Official:

I concur with the above recommendation.

Signed: _____ Name: Henri R. Bisson

Date: 6/4/96 Title: District Manager

ATTACHMENT TO THE CONTAMINANT SURVEY CHECKLIST

- Selected Federal Lands -
(BLM Serial #CA-30070)

A Level-1 Contaminant Survey was previously performed on September 24 and 25, 1992, for the proposed land exchange covering the Federal lands pursuant to Section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, ("CERCLA") (42 U.S.C. § 9601 and 40 CFR Part 373). It was determined at that time that hazardous substances might occur on the Federal lands. Accordingly, BLM determined (and the exchange proponent agreed) that if at any time after conveyance of the Federal lands any condition on the land was in violation of any Federal, State or local laws or regulations, the proponent or its successors would be responsible to immediately take all actions necessary to abate any such violation and perform all activities required to remediate the site consistent with all applicable laws and regulations, irrespective of whether the proponent or its successors caused, contributed to, or had actual knowledge of the activities or conditions causing the violations. Further, proponent and its successors agreed to hold the United States harmless from any liability and expenses resulting from such condition or activities.

Subsequently, on February 10 and 11, 1994, the California Department of Toxic Substances Control ("DTSC") conducted an inspection of the project site in response to certain citizen allegations. Representatives of BLM were present during the DTSC inspection. The DTSC's Complaint Inspection and Sampling Report, dated April 7, 1994, stated that no evidence was found to support the allegations that hazardous waste was disposed at the project site in sufficient quantities or with toxic characteristics so as to noticeably impact the environment or to warrant a formal enforcement action. On May 20, 1994, the DTSC issued an Addendum Report supplementing its April 7, 1994, report and reaffirming the conclusions of the April 7, 1994, report.

The U.S. Environmental Protection Agency ("EPA") issued its own report on August 19, 1994, after undertaking a Federal Facility Preliminary Assessment review of the site under CERCLA to determine whether the site should be placed on the EPA's National Priorities List (NPL). By letter to BLM dated August 26, 1994, EPA stated that the Preliminary Assessment requirements had been met for the site, and no further action by EPA was warranted at that time.

Another Level-1 Contaminant Survey was performed on February 6, 1996, pursuant to CERCLA covering the Federal lands being proposed for exchange. No evidence or recorded information was found to indicate that any hazardous substance (as defined by CERCLA) was stored, disposed of, or released on the subject lands. General observations include:

1. Eight above ground fuel storage tanks (Checklist Item #B5) are located on nearby private lands in the northwest quarter of Section 33 (Mineral Survey #4848), Township 3 South, Range 14 East, SBBM. No evidence of leakage was observed.

2. The equipment storage and machinery repair area (Checklist Item #B12) located on Federal lands in the southeast quarter of Section 33, Township 3 South, Range 14 East, SBBM, was inspected and no evidence hazardous substances were observed. Most of the equipment that had been stored there has been removed.

3. The 55 gallon drums that were observed during the last Level-1 Contaminant Survey have been removed from the site. No evidence of leakage were observed in the areas where the drums were located.

4. All electrical transformers located on Federal lands have been inspected, tested and certified. No evidence of leakage was observed.

5. Some debris was observed in the northwest quarter of Section 12, Township 4 South, Range 14 East, SBBM, consisting of old lumber, metal grating, old refrigerators and washing machines, etc. This area was previously used by Eagle Mountain residents for recreational livestock activities and is on lands proposed to be exchanged to Kaiser. No evidence of hazardous substances was observed.

6. Inquiry was made concerning operation of the sewage disposal facility located on nearby private lands (owned by Kaiser) in Section 1, Township 4 South, Range 14 East, SBBM. The facility is currently operating in compliance with the operational permit from the California Regional Water Quality Control Board ("RWQCB"). A copy of Order No. 88-14 issued January 27, 1988, by the RWQCB was obtained from Kaiser and only covers operation of the facility on Kaiser's lands. Part of the sewage disposal facility is located on Federal lands in Section 12, Township 4 South, Range 14 East, SBBM. This portion of the facility has not been in use for over ten years and is on lands proposed to be exchanged to Kaiser.

7. A record search for past uses which might indicate potential problems on the Federal lands (Checklist Item #C1) was made. The only past uses found that might indicate potential problems would be from Kaiser's past mining operations. No evidence of hazardous substances was observed from these mining operations.

FEDERAL LANDS

San Bernardino Meridian
Riverside County, California

T. 3 S., R. 14 E.

Sec. 25:	Lots 5 and 6, SW¼, W½SE¼
Sec. 26:	SW¼, SW¼SE¼, E½SE¼
Sec. 27:	Lots 1 and 2, SE¼, N½SW¼
Sec. 28:	Lot 9
Sec. 33:	Lots 1, 2, 4, 6, 8 and 11, S½NE¼, E½NW¼, SE¼
Sec. 34:	Lots 1-7, SE¼SE¼, W½SE¼, SW¼
Sec. 35:	Lots 1-4 and 9, NE¼NW¼, N½NE¼
Sec. 36:	Lot 12

T. 3 S., R. 15 E.

Sec. 31:	Lots 5, 10-14, 17-19

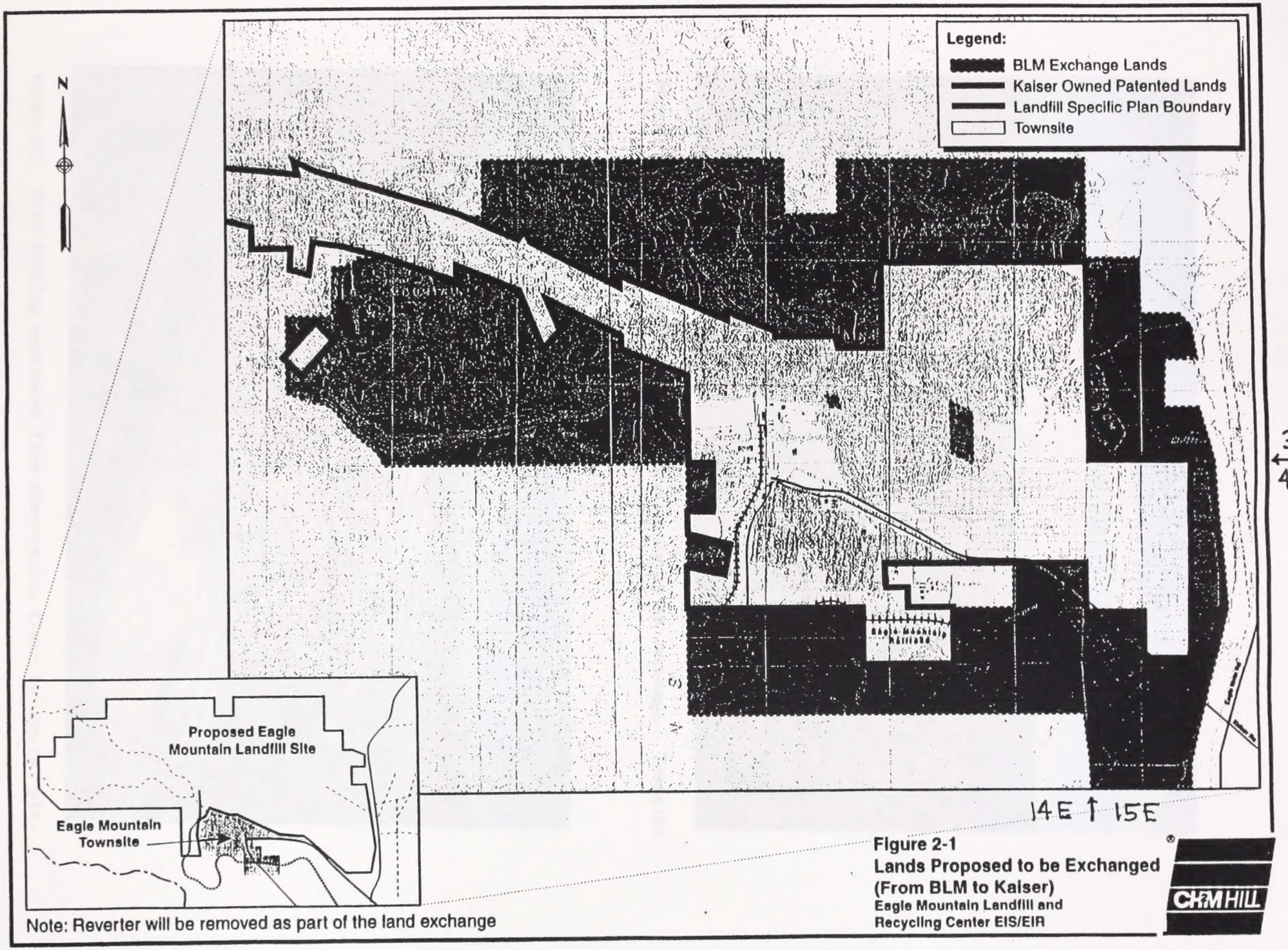
T. 4 S., R. 14 E.,

Sec. 1:	Lots 8-11, SW¼SE¼, E½SE¼SW¼, E½NW¼SE¼
Sec. 2:	Lots 7-9, S½SW¼, SW¼SE¼, W½SE¼SE¼
Sec. 11:	Lots 1-4
Sec. 12:	Lots 1-4

T. 4 S., R. 15 E.,

Sec. 6:	Lots 4, 5, 8-11
Sec. 7:	Lots 4-10, 12 and 13

Containing a total of approximately 3,481 acres.



Note: Reverter will be removed as part of the land exchange

Figure 2-1
Lands Proposed to be Exchanged (From BLM to Kaiser)
Eagle Mountain Landfill and Recycling Center EIS/EIR

CH2MHILL

m115231.T6.20 BLM 1/96

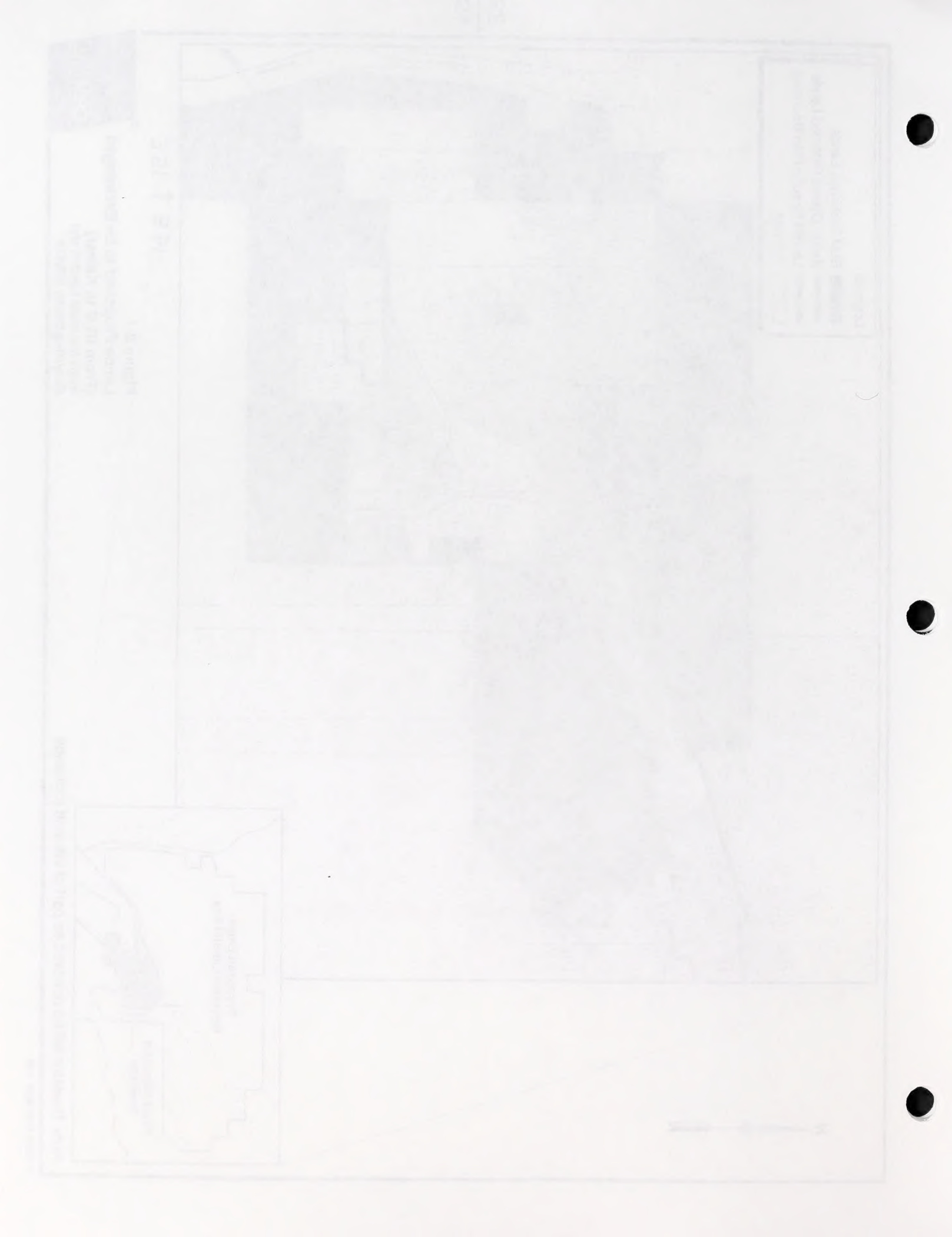




Photo #1: View looking southeast across lands to be exchange. Townsite is at middle-left of picture.



Photo #2: View looking southwest from observation tower at central pit.



Photo #3: View looking southwest from observation tower. Fuel tanks are located on nearby private land. Federal land in foreground.



Photo #4: Substation and transformers near observation tower (note blue certification tags).



Photo #5: Substation and transformer near "core garden" tunnels.



Photo #6: Transformers near "core garden" tunnels (background).



Photo #7: "Core garden" tunnels.



Photo #8: Transformers outside entrance to "core garden" tunnels (note blue certification tags).



Photo #9: Debris at former livestock area.



Photo #10: Sewage settling ponds on Federal lands (not in use).

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 88-14

WASTE DISCHARGE REQUIREMENTS
FOR
KAISER STEEL CORPORATION
SEWAGE DISPOSAL FACILITY
Eagle Mountain - Riverside County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. Kaiser Steel Corporation (hereinafter also referred to as the discharger), P.O. Box 158, Eagle Mountain, California, 92241, submitted a Report of Waste Discharge, dated August 17, 1987, for reactivating the sewage disposal facility at its presently closed Eagle Mountain Mine. Operations at this mine were closed in 1982 and most of the personnel housing was vacant by 1983. Currently, a prison is to be located at this site.

2. The discharger is proposing to lease a portion of the existing housing facilities to the Department of Corrections for a population of about 350 including the prison inmates, staff and staff families.

3. The discharger proposes to discharge a maximum of 35,000 gallons-per-day of domestic sewage into four oxidation basins for final disposal by evaporation and infiltration. The site is located in the SW¼, SW¼ of Section 1, T4S, R14E, SBB&M. The discharge facilities have a design capacity of 270,000 gallons-per-day.

4. There are no domestic wells within 500 feet of the discharge facilities described in Finding No. 2 (above).

5. The discharge has been subject to waste discharge requirements adopted in Board Order No. 75-3, which prescribed requirements for an average discharge of 180,000 gallons-per-day.

6. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted by the Regional Board on November 14, 1984.

7. The Basin Plan delineates the location of discharge to be in the Chuckwalla Hydrologic Unit, which has the following beneficial uses of ground water:

   a. Municipal supply
   b. Industrial supply
   c. Agricultural supply

8. The Board has notified the discharger and interested agencies and persons of its intent to revise waste discharge requirements for the discharge.

9. The Board in a public meeting heard and considered all comments pertaining to the discharge.

10. These waste discharge requirements govern an existing facility, which the discharger is currently operating, and therefore are exempt from the provisions of the California Environmental Quality Act in accordance with Section 15301, Chapter 3, Title 14 of the California Administrative Code.

IT IS HEREBY ORDERED, the discharger shall comply with the following:

A. Discharge Specifications

1. Neither the treatment nor the discharge of wastewater shall create a pollution or a nuisance as defined in Division 7 of the California Water Code.

2. No wastewater other than domestic sewage shall be discharged into the sewage disposal system described in Finding No. 2 (above).

3. A minimum depth of freeboard of at least two (2) feet shall be maintained in each earthen basin.

4. Treated or untreated sludge or similar solid waste materials, shall be disposed only at locations approved by the Regional Board's Executive Officer.

5. Adequate measures shall be taken to ensure that unauthorized persons and animal pets are effectively excluded from contact with the discharge.

6. Adequate measures shall be taken to ensure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.

7. There shall be no surface flow of wastewater away from the discharge facilities.

8. Disposal by ponding shall be conducted in such manner that there shall be no stranded or exposed sewage solids.

9. Treatment and discharge of wastewater shall be conducted by technical procedures which will maintain a surface aerobic environment, and the surface wastewater shall contain a dissolved oxygen concentration of not less than 2 mg/l.

B. Provisions

1. Prior to any modifications in this facility which could result in material change in the quality or quantity of wastewater discharged, or any material change in location of discharge, the discharger shall report in writing to the Regional Board.

2. The discharger shall comply with "Monitoring and Reporting Program No. 88-14", and future revisions thereto, as specified by the Executive Officer.

3. In the event of any change in control or ownership of land or waste disposal facilities owned or controlled by the discharger, the discharger shall:

   a. Notify the Board of such change; and

   b. Transmit a copy of this Order to the succeeding owner or operator, and file a copy of the transmittal letter with this Board.

4. This Order supersedes Board Order No. 75-3.

I, Arthur Swajian, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on January 27, 1988.

Arthur Swajian

Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 88-14
FOR
KAISER STEEL CORPORATION
SEWAGE DISPOSAL FACILITY
Eagle Mountain - Riverside County

Location of Discharge: Portion of SW¼, SW¼ of Section 1, T4S, R14E, SBB&M

MONITORING

The discharger shall submit the following information in an annual status report:

1. Estimate of average daily flow (gpd) of sewage discharged to basin(s).
2. Estimate of number of persons presently discharging to the sewerage system.
3. List of any proposed changes during the coming year.
4. Explain any problems in the sewerage system during the preceding year.

REPORTING

1. Monitoring reports shall be submitted to the Regional Board annually by January 15th of each year to:

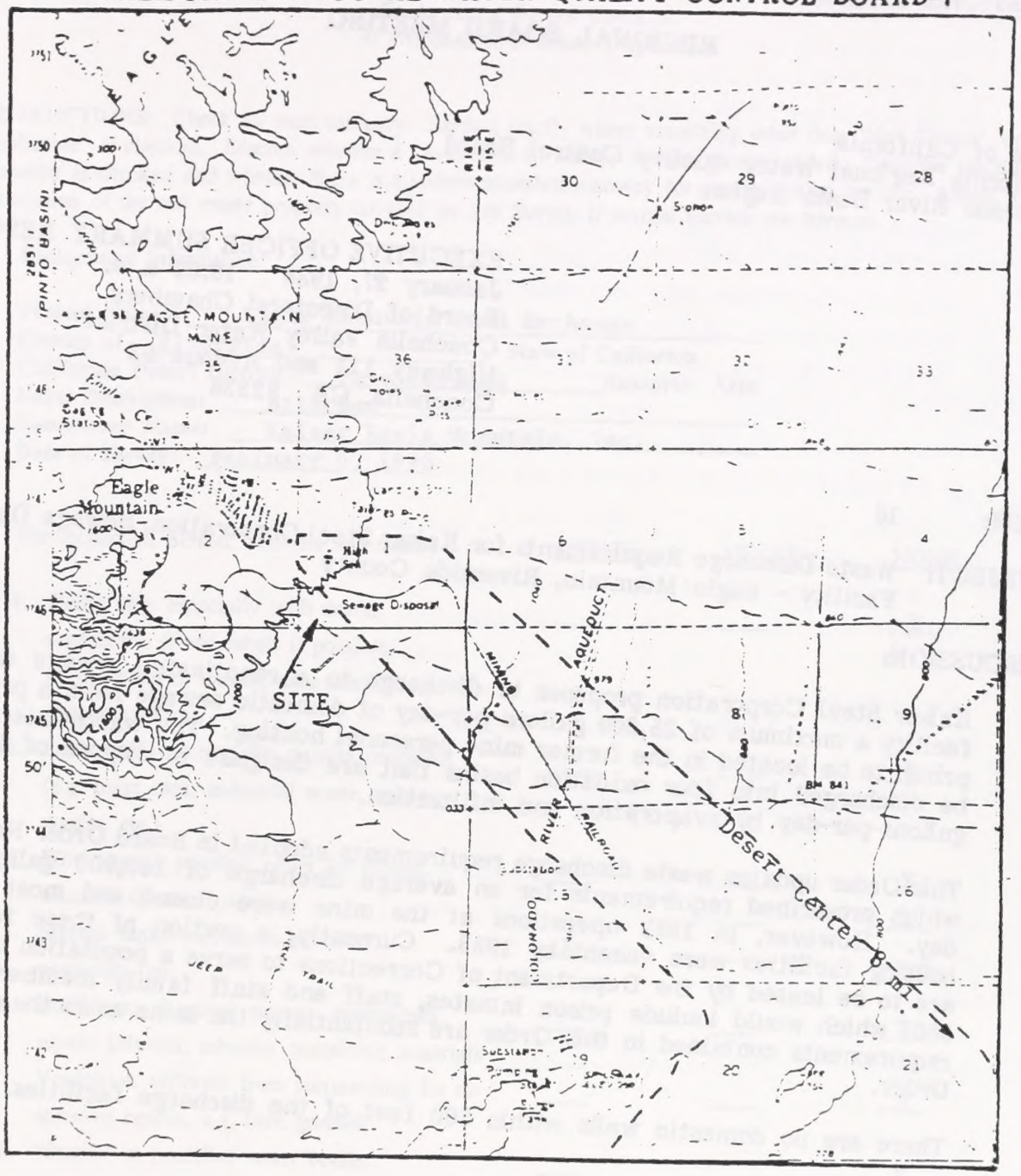
   California Regional Water Quality Control Board
   Colorado River Basin Region
   73-271 Highway 111, Suite 21
   Palm Desert, CA 92260

2. Report immediately any failure of the wastewater system by telephone and follow-up by letter.

ORDERED BY: Arthur Swajian
Executive Officer

January 27, 1988
Date

CALIFORNIA REIGONAL WATER QUALITY CONTROL BOARD-7



SITE MAP

KAISER STEEL CORPORATION
SEWAGE DISPOSAL FACILITY
Eagle Mountain - Riverside County
Portion of SW¼, SW¼ of Section 1, T4S, R14E, SBB&M
USGS Coxcomb Mts. 15 min. Topographic Map

Order No. 88-14

REGIONAL BOARD MEETING

State of California
California Regional Water Quality Control Board
Colorado River Basin Region

EXECUTIVE OFFICER SUMMARY REPORT
January 27, 1988 10:00 a.m.
Board of Directors' Chambers
Coachella Valley Water District
Highway 111 and Avenue 52
Coachella, CA 92236

ITEM: 16

SUBJECT: Waste Discharge Requirements for Kaiser Steel Corporation, Sewage Disposal Facility - Eagle Mountain, Riverside County

DISCUSSION:

Kaiser Steel Corporation proposes to discharge to a reactivated sewage disposal facility a maximum of 35,000 gallons-per-day of domestic sewage from a proposed prison to be located in the former mine personnel housing. The wastewater would be discharged into four oxidation basins that are designed to dispose of 270,000 gallons-per-day by evaporation and infiltration.

This Order updates waste discharge requirements adopted in Board Order No. 75-3, which prescribed requirements for an average discharge of 180,000 gallons-per-day. However, in 1982 operations at the mine were closed and most of the housing facilities were vacant by 1983. Currently, a portion of these facilities are to be leased by the Department of Corrections to serve a population of about 350, which would include prison inmates, staff and staff family members. The requirements contained in this Order are substantially the same as in the previous Order.

There are no domestic wells within 500 feet of the discharge facilities.

RECOMMENDATION:

The attached Order No. 88-14 be adopted.

DISPOSAL

Casefile # CA-30070

CA Office Code CA-066

California BLM - Level I Survey
Contaminant Survey Checklist
of Proposed Real Estate Disposals

Townsite Reverter

INSTRUCTIONS: Check for each category. Explain briefly where something other than "No", "None", or "Not Applicable" is checked. Discuss whether a Level II or III Survey will be recommended. Describe the distance if nearby is checked and whether there is a known potential pathway for contamination on site. Attach a legal description of the real estate property covered by this Survey if several parcels are covered.

A. Background Information:

Project Name: Eagle Mountain Land Exchange
County of Riverside, **State of California**
California Desert District - Palm Springs **Resource Area**
Legal Description: Attached
Landowner Name: Kaiser Eagle Mountain, Inc.
Date of Survey: February 6, 1996

B. Site Inspection Screen: On-site and nearby	ONSITE	NEARBY	NONE
1. Dump sites especially with drums, containers. (Read labels if possible; do not open or handle, note identifying characteristics).	___	___	X
2. Other debris potentially causing problems (e.g. paint cans, industrial waste, mining wastes, etc.).	___	___	X
3. Fill material: possible cover for dumps.	___	___	X
4. Unusual chemical odors.	___	___	X
5. Storage tanks: petroleum products, pesticides, etc.	X	___	___
6. Buildings: chemical storage, equipments, repair, solvents, asbestos containing materials	___	___	X
7. Vegetation different from surrounding for no apparent reason, e.g. bare ground.	___	___	X
8. "Sterile" or modified water bodies.	___	___	X
9. Oil seeps, stained ground, discolored stream banks.	___	___	X
10. Oil slicks on water, unusual color in water.	___	___	X
11. Spray operation base: air strip, equipment parking area.	___	___	X
12. Machinery repair areas	X	___	___
13. Pipelines: major electrical equipment.	___	___	X
14. Oiled or formerly oiled roads.	___	___	X
15. Evidence of leakage around electric transmission lines: pole mounted transformers, pad mounted transformers.	___	___	X

C. Record Searches (coordinate with Realty, title search, others as appropriate).

1. Past uses which might indicate potential problems of site (Circle any that are applicable). Manufacturing, service stations, dry cleaning, air strip, pipelines, rail lines, facilities with large electrical transformers or pumping equipment, petroleum production, landfills, scrap metal, auto, or battery recycling, military, labs, wood preserving, agricultural chemicals, other describe:
   Mining Operations None_____

2. Nearby land uses, especially upstream or upgradient, or that might have had waste to dump at site. Identify:
   _____ None__X__

3. Known contaminant sites in vicinity: NPL, State sites, candidate sites (check with EPA; State EPA counterpart). Yes____ No__X__

4. Interviews on past use: owners, neighbors, county agents and any appropriate Federal authorities: Problems? Yes____ No__X__

5. Agricultural drainage history: surface, subsurface drains. Yes____ No__X__

D. A Federal agency has notified the Department under Section 120(h) of CERCLA (Superfund) of past or current presence of a hazardous substance.
   Not Applicable _____ Yes____ No__X__

E. A non-Federal entity has documented hazardous materials on or near the site.
   Not Applicable _____ Yes____ No__X__

F. A Level II study is recommended. Yes____ No__X__
   A Level III study is recommended. Yes____ No__X__

G. Disposal Certification:

The above described lands have been examined in accordance with Section 120(h) of CERCLA. No evidence of recorded information was found to indicate that any hazardous substance was stored for one year or more or disposed of or released on the property.

Field Personnel:

Signed: Richard Waggoner Name: **Richard Waggoner**

Date: 5/22/96 Title: **Realty Specialist**

Area Manager:

Julia Dougan ✓ MAY 29 1996

Julia Dougan Concur Not Concur Date

District Office Haz-Mat Coordinator:

✓ 06/07/96

John Key Concur Not Concur Date

H. Designated Approving Official:

I concur with the above recommendation.

Signed: Henri R. Bisson Name: **Henri R. Bisson**

Date: 6/4/96 Title: District Manager

ATTACHMENT TO THE CONTAMINANT SURVEY CHECKLIST

- Federal Reversionary Interest on Townsite Lands -
(BLM Serial #CA-30070)

On February 10 and 11, 1994, the California Department of Toxic Substances Control ("DTSC") conducted an inspection of the project site in response to certain citizen allegations. Representatives of BLM were present during the DTSC inspection. The DTSC's Complaint Inspection and Sampling Report, dated April 7, 1994, stated that no evidence was found to support the allegations that hazardous waste was disposed at the project site in sufficient quantities or with toxic characteristics so as to noticeably impact the environment or to warrant a formal enforcement action. On May 20, 1994, the DTSC issued an Addendum Report supplementing its April 7, 1994, report and reaffirming the conclusions of the April 7, 1994, report.

The U.S. Environmental Protection Agency ("EPA") issued its own report on August 19, 1994, after undertaking a Federal Facility Preliminary Assessment review of the site under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, ("CERCLA") to determine whether the site should be placed on the EPA's National Priorities List ("NPL"). By letter to BLM dated August 26, 1994, EPA stated that the Preliminary Assessment requirements had been met for the site, and no further action by EPA was warranted at that time.

This Level-1 Contaminant Survey was performed on February 6, 1996, pursuant to Section 120(h) of CERCLA (42 U.S.C. § 9601 and 40 CFR Part 373) covering the lands encumbered by the Federal reversionary interest being proposed for exchange. The reversionary interest is located on lands that were previously conveyed to the exchange proponent under U.S. Patent #1153422 for a millsite and campsite ("Townsite"). No evidence or recorded information was found to indicate that any hazardous substance (as defined by CERCLA) was stored, disposed of, or released on the subject lands. General observations include:

1. Four underground 10,000 gallon gasoline storage tanks (Checklist Item #B5) were located at the former gas station and were removed in 1985. This site has not been formally "closed" by the County and is suspected of being contaminated from leaking tanks in the past (Jim Ray, Riverside County Environmental Health - May 1996). Another underground 2,200 gallon tank used for storing waste oil near the main shop area was removed in 1995 under a permit from the County Division of Environmental Health. This site is in the process of being brought to "closure" by the County. This tank was also used to collect overflow from three above-ground tanks used for storing transmission oil, hydraulic oil, and motor oil which are also located near the main shop area. These three tanks appeared not to currently be in use and no evidence of leakage was observed around them. Kaiser is the current landowner and a potentially responsible party in any required remedial actions.

2. The equipment maintenance (machine repair) area (Checklist Item #B12) located near the former warehouse is not in use and no evidence hazardous substances was observed.

3. All electrical transformers located on Townsite lands have been inspected, tested and certified. No evidence of leakage was observed.

4. Past uses which might indicate potential problems at the Townsite (Checklist Item #C1) have previously been investigated by the County Division of Environmental Health and the State Department of Toxic Substances Control. No evidence of hazardous substances was found.

TOWNSITE

The reversionary interest of the United States will be conveyed in that certain tract of land patented under Patent 1153422 pursuant to Private Law 790 enacted by the United States Congress on July 8, 1952, which tract is described as follows:

San Bernardino Meridian
Riverside County, California

T. 3 S., R. 14 E.

Sec. 35:	Lots 5-8, S½SW¼
Sec. 36:	Lot 7

T. 4 S., R. 14 E.

Sec. 1:	Lot 4, SW¼NW¼
Sec. 2:	Lots 1-3, E½ of Lot 4, S½NE¼, SE¼NW¼, N½NE¼SE¼, NE¼NW¼SE¼

Containing a total of approximately 460 acres.

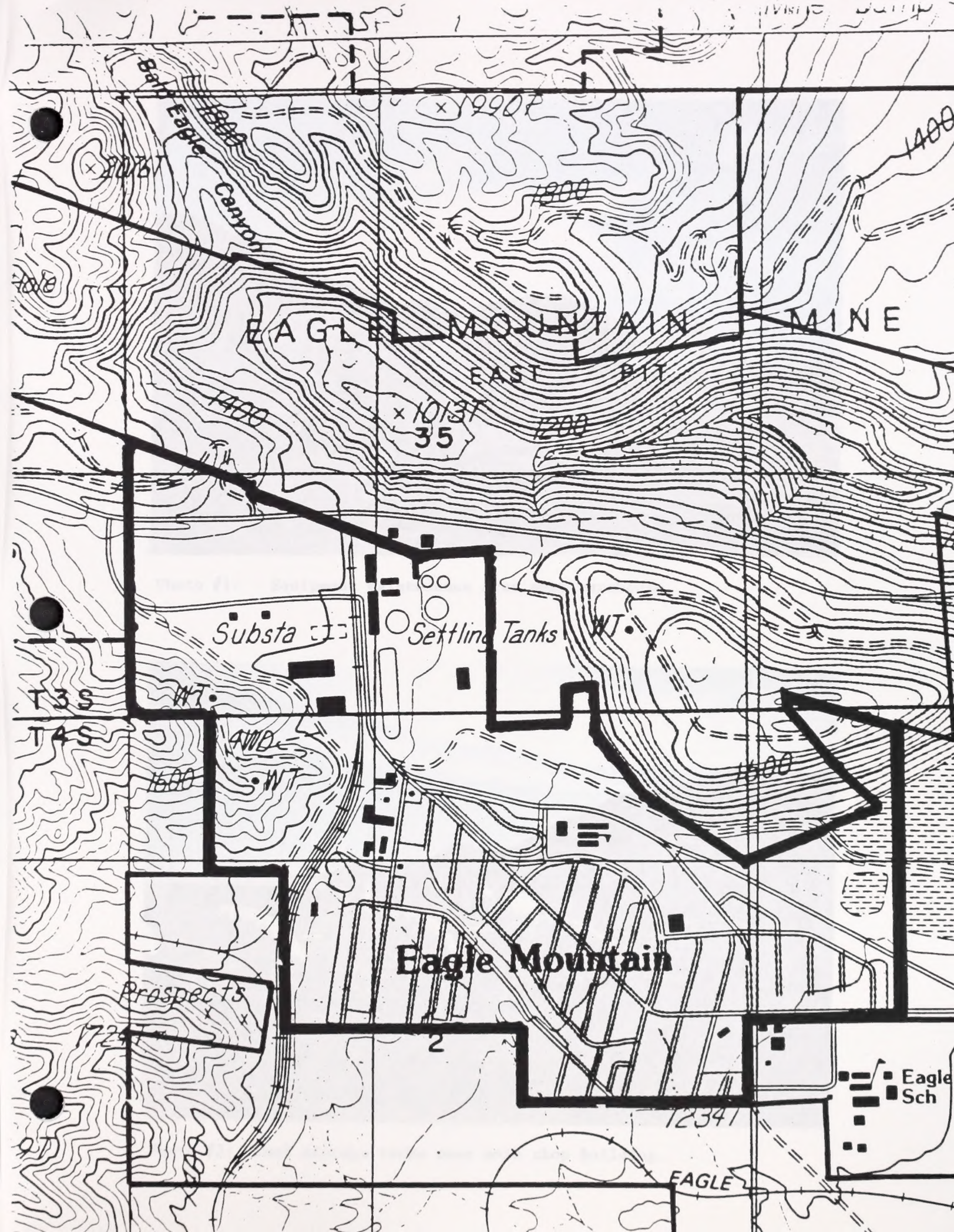

Bald Eagle Canyon
EAGLE MOUNTAIN MINE
EAST PIT
1290T
1013T
35
Substa
Settling Tanks
WT
T3S
T4S
4WD
Eagle Mountain
Prospects
2
Eagle Sch
EAGLE



Photo #1: Equipment maintenance area near warehouse.



Photo #2: Fuel storage tanks near main shop building.



Photo #3: Ore conveyor.



Photo #4: View looking north towards Joshua Tree National Park.

ACQUISITION
Casefile # CA-30070
CA Office Code CA-066

California BLM - Level I Survey
Contaminant Survey Checklist
of Proposed Real Estate Acquisitions

Offered Private Lands

INSTRUCTIONS: Check for each category. Explain briefly where something other than "No", "None", or "Not Applicable" is checked. Discuss whether a Level II or III Survey will be recommended. Describe the distance if nearby is checked and whether there is a known potential pathway for contamination on site. Attach a legal description of the real estate property covered by this Survey if several parcels are covered.

A. Background Information:

Project Name: Eagle Mountain Land Exchange
County of Riverside, **State of California**
California Desert District - Palm Springs **Resource Area**
Legal Description: See Attached Exhibit "A"
Landowner Name: Kaiser Eagle Mountain, Inc.
Date of Survey: April 5,8,12, 1996

B. Site Inspection Screen: On-site and nearby	ONSITE	NEARBY	NONE
1. Dump sites especially with drums, containers. (Read labels if possible; do not open or handle, note identifying characteristics).	___	___	X
2. Other debris potentially causing problems (e.g. paint cans, industrial waste, mining wastes, etc.).	___	___	X
3. Fill material: possible cover for dumps.	___	___	X
4. Unusual chemical odors.	___	___	X
5. Storage tanks: petroleum products, pesticides, etc.	___	___	X
6. Buildings: chemical storage, equipments, repair, solvents, asbestos containing materials	___	___	X
7. Vegetation different from surrounding for no apparent reason, e.g. bare ground.	___	___	X
8. "Sterile" or modified water bodies.	___	___	X
9. Oil seeps, stained ground, discolored stream banks.		___	X
10. Oil slicks on water, unusual color in water.	___	___	X
11. Spray operation base: air strip, equipment parking area.	___	___	X
12. Machinery repair areas	___	___	X
13. Pipelines: major electrical equipment.	___	___	X
14. Oiled or formerly oiled roads.	___	___	X
15. Evidence of leakage around electric transmission lines: pole mounted transformers, pad mounted transformers.	___	___	X

C. Record Searches (coordinate with Realty, title search, others as appropriate).

1. Past uses which might indicate potential problems of site (Circle any that are applicable).
   Manufacturing, service stations, dry cleaning, air strip, pipelines, (rail lines) facilities with large electrical transformers or pumping equipment, petroleum production, landfills, scrap metal, auto, or battery recycling, military, labs, wood preserving, agricultural chemicals, other describe:
   _____ None_____

2. Nearby land uses, especially upstream or upgradient, or that might have had waste to dump at site. Identify:
   _____ None__X__

3. Known contaminant sites in vicinity: NPL, State sites, candidate sites (check with EPA; State EPA counterpart). Yes__X__ No____
   ***Chocolate Mountains Gunnery Range**

4. Interviews on past use: owners, neighbors, county agents and any appropriate Federal authorities: Problems? Yes____ No__X__

5. Agricultural drainage history: surface, subsurface drains. Yes____ No__X__

D. A Federal agency has notified the Department under Section 120(h) of CERCLA (Superfund) of past or current presence of a hazardous substance.
   Not Applicable __X__ Yes____ No____

E. A non-Federal entity has documented hazardous materials on or near the site.
   Not Applicable _____ Yes____ No__X__

F. A Level II study is recommended. Yes____ No__X__
   A Level III study is recommended. Yes____ No__X__

G. Acquisition Certification:

I hereby certify that to the best of my knowledge no contaminants are present on this real estate, and there are no obvious signs of any effects of contamination.

Field Personnel:

Signed: D.C. Stager Name: D.C. Stager

Date: 6/16/96 Title: L.E. Ranger/Haz-Mat Coordinator

Area Manager:

Julia Dougan ✓ 6/17/96

Julia Dougan Concur Not Concur Date

District Office Haz-Mat Coordinator:

John Key ✓ 06/17/96

John Key Concur Not Concur Date

H. Designated Approving Official:

I concur with the above recommendation.

Signed: Henri R. Bisson Name: Henri R. Bisson

Date: 6/17/96 Title: District Manager

Exhibit A

DESCRIPTION

(CA-30070)

PARCEL 1:

EAST HALF OF EAST HALF OF SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 8 SOUTH, RANGE 11 EAST, SAN BERNARDINO BASE AND MERIDIAN.

PARCEL 2:

A TRIANGULAR PORTION OF LAND IN THE NORTHWEST CORNER OF NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 8 SOUTH, RANGE 11 EAST, SAN BERNARDINO BASE AND MERIDIAN, THE BOUNDARIES OF SAID TRIANGULAR PORTION BEING DESCRIBED AS FOLLOWS:

STARTING AT THE POINT OF BEGINNING WHICH IS THE NORTHWEST SECTION CORNER OF SAID SECTION TWENTY-THREE (23);
THENCE SOUTH 1 DEGREES 59' 34" WEST, ALONG THE WEST LINE OF SAID SECTION TWENTY-THREE (23) A DISTANCE OF 834.50 FEET;
THENCE NORTH 59 DEGREES 04' 04" EAST, 1,559.70 FEET TO A POINT ON THE NORTH LINE OF SAID SECTION TWENTY-THREE (23);
THENCE NORTH 88 DEGREES 35' 26" WEST, 1,309.30 FEET ALONG THE NORTH LINE OF SAID SECTION TWENTY-THREE (23) TO THE NORTHWEST SECTION CORNER OF SAID SECTION TWENTY-THREE (23), WHICH WAS THE POINT OF BEGINNING, CONTAINING 12.54 ACRES, MORE OR LESS.

PARCEL 3:

THE NORTHEAST QUARTER OF SECTION 13, TOWNSHIP 8 SOUTH, RANGE 11 EAST, SAN BERNARDINO BASE AND MERIDIAN.

PARCEL 4:

ALL OF SECTION 35, TOWNSHIP 7 SOUTH, RANGE 12 EAST;

SAVE AND EXCEPTING THEREFROM, 10.00 ACRES CONDEMNED UNDER SUIT NO. 2054-Y, UNITED STATES OF AMERICA VS. 112,613.67 ACRES OF LAND, MORE OR LESS, IN IMPERIAL AND RIVERSIDE COUNTIES, ETC., ET AL.

PARCEL 5:

THE NORTH HALF OF THE SOUTHWEST QUARTER, THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER AND THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 36 TOWNSHIP 7 SOUTH, RANGE 12 EAST, SAN BERNARDINO BASE AND MERIDIAN;

EXCEPTING THEREFROM ALL OIL, GAS, OIL SHALE, ~~COAL~~, PHOSPHATE, SODIUM, GOLD, SILVER, AND ALL OTHER MINERAL DEPOSITS CONTAINED IN SAID LANDS, AS RESERVED BY THE STATE OF CALIFORNIA IN THE PATENT RECORDED OCTOBER 21, 1948 IN BOOK 1020 PAGE 533 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 6:

ALL OF SECTION 31, TOWNSHIP 7 SOUTH, RANGE 13 EAST, SAN BERNARDINO BASE AND MERIDIAN;

EXCEPTING THEREFROM THAT PORTION TAKEN BY THE UNITED STATES OF AMERICA UNDER DECREE OF CONDEMNATION RECORDED FEBRUARY 18, 1942 IN BOOK 531 PAGE 459 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 7:

ALL OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 14 EAST, SAN BERNARDINO BASE AND MERIDIAN.

PARCEL 8:

THE WEST HALF OF SECTION 21, TOWNSHIP 6 SOUTH, RANGE 14 EAST, SAN BERNARDINO BASE AND MERIDIAN.

PARCEL 9:

THE WEST HALF OF THE WEST HALF OF SECTION 16, TOWNSHIP 6 SOUTH, RANGE 14 EAST, SAN BERNARDINO BASE AND MERIDIAN;

EXCEPTING THEREFROM ALL OIL, GAS, OIL SHALE, PHOSPHATE, SODIUM, GOLD, SILVER AND ALL OTHER MINERAL DEPOSITS CONTAINED IN SAID LANDS, AS RESERVED BY THE STATE OF CALIFORNIA IN THE PATENT RECORDED OCTOBER 21, 1948 IN BOOK 1020 PAGE 533 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 10:

THE NORTH HALF AND THE NORTH HALF OF THE SOUTH HALF OF SECTION 27, TOWNSHIP 5 SOUTH, RANGE 14 EAST, SAN BERNARDINO BASE AND MERIDIAN.

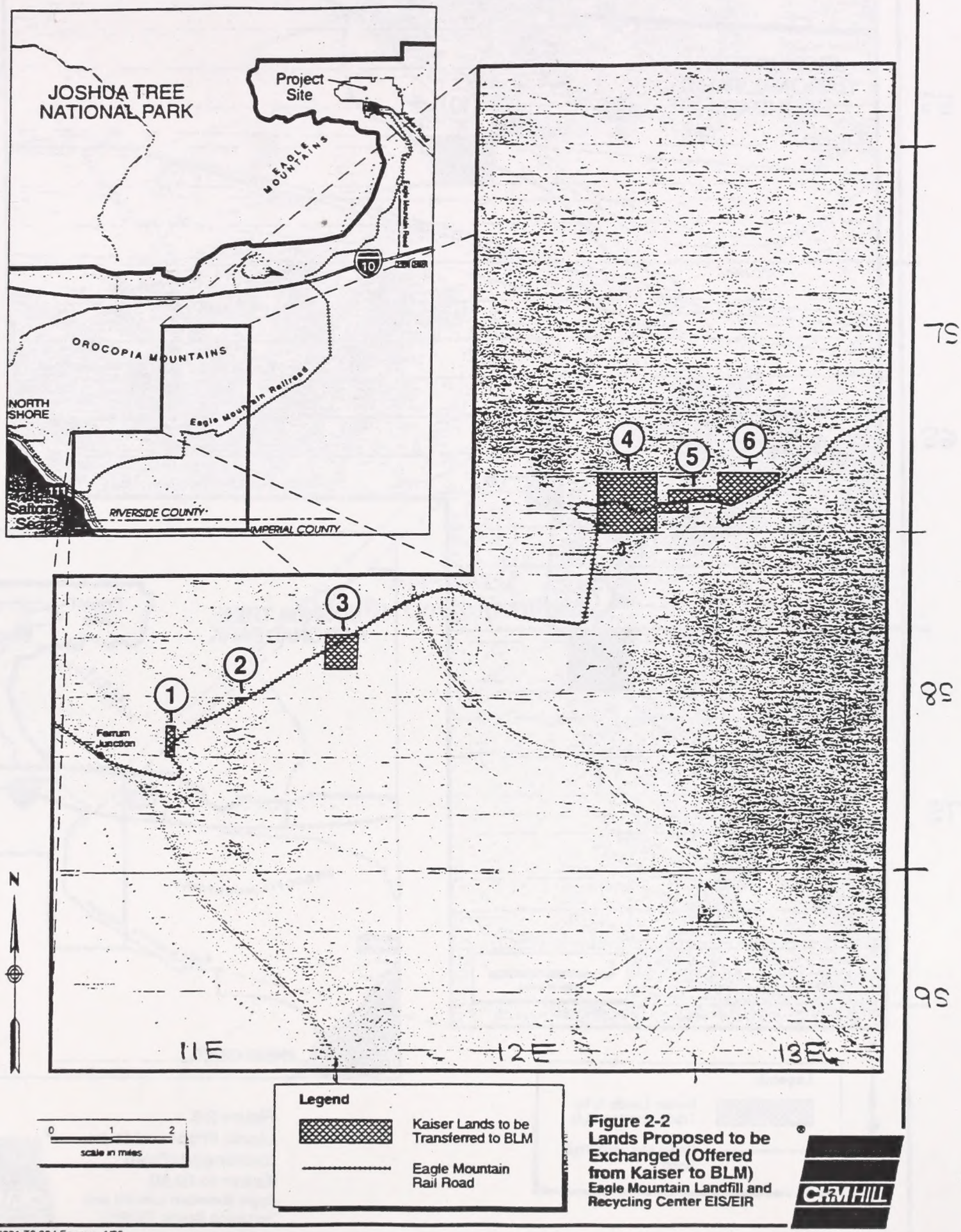


Figure 2-2
Lands Proposed to be Exchanged (Offered from Kaiser to BLM)
Eagle Mountain Landfill and Recycling Center EIS/EIR

CH2M HILL

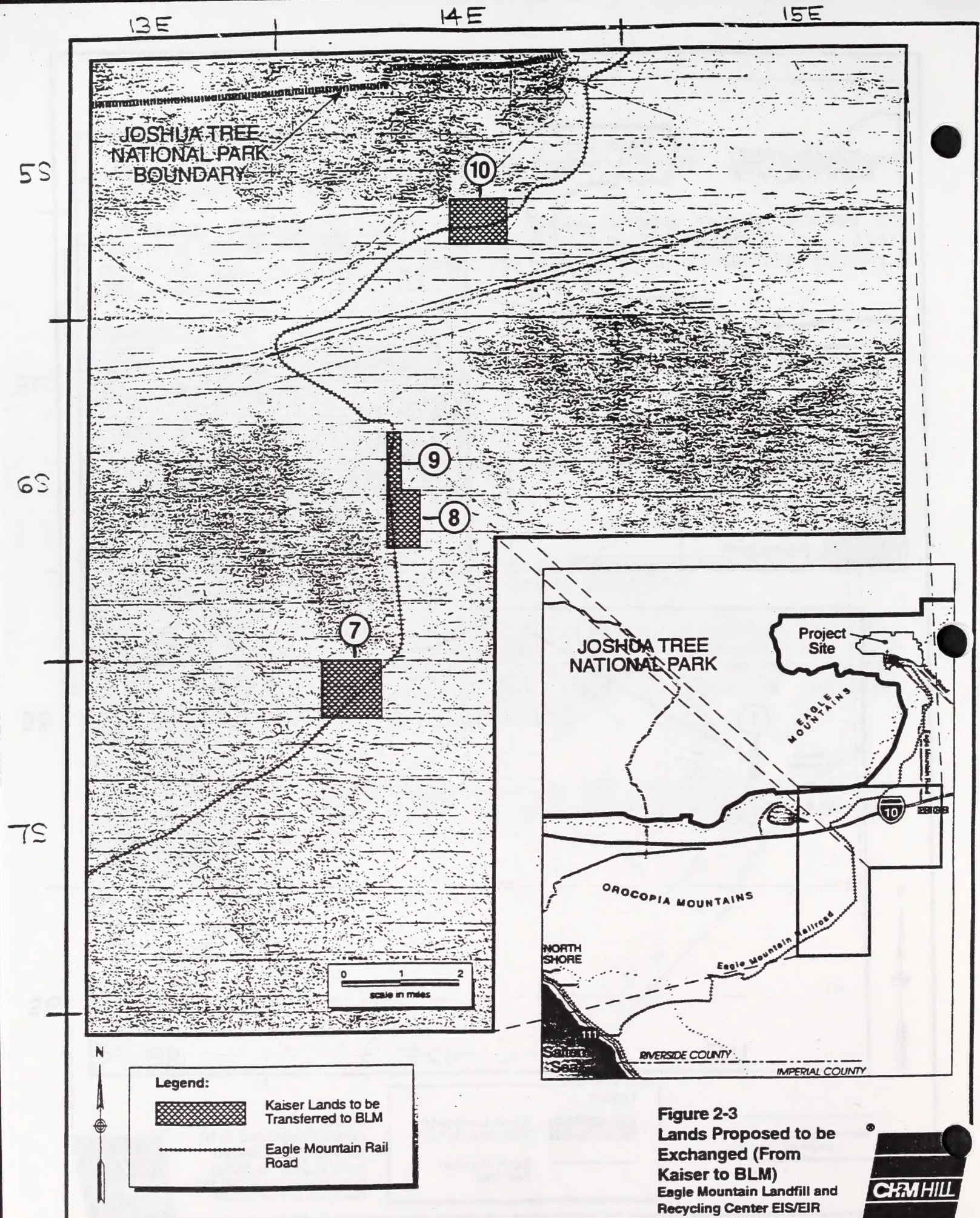


Figure 2-3
Lands Proposed to be Exchanged (From Kaiser to BLM)
Eagle Mountain Landfill and Recycling Center EIS/EIR

CH2M HILL

m115231.T6.20 LEovrvw2 1/96

Appendix Q
Medfly Correspondence

.TE OF CALIFORNIA — PETE WILSON, Governor

EPARTMENT OF FOOD AND AGRICULTURE

1220 N Street, P.O. Box 942871
Sacramento, California 94271-0001

August 24, 1994

Ms. Donn Zea
Vice Chairperson
Environment and Natural Resources Committee
California Republican Party
1903 West Magnolia Boulevard
Burbank, California 91506

Dear Ms. Zea:

The California Department of Food and Agriculture (CDFA) and the United States Department of Agriculture (USDA) have examined the potential for trash to export the Medfly from areas currently undergoing eradication treatments. The greatest risk is that infested fruit will be removed and discarded in someone's garden. We have a quarantine in place to deal with this dispersal route. It is possible that commercial garden maintenance workers could remove infested fruit. We have compliance agreements in place with these companies. The agreements stipulate exactly how all garden refuse shall be handled if it is to leave the eradication zone.

Lastly, it is possible that infested fruit could be put into homeowner refuse and taken out of the eradication zone during the weekly pickups of this material. In 1983/84, this issue was examined by the Mexican Fruit Fly Science Advisory Panel. They concluded that homeowner refuse from garbage cans posed an extremely small risk of having viable Mexican fruit fly (MFF) pupae. The trash is compacted in the garbage truck and further compacted and buried at the landfield. The combined actions of compaction and burial will destroy virtually all of the MFF pupae. My staff and the Medfly experts they have contacted concur that this analysis applies also to the Medfly. Neither the CDFA or USDA have any reason to believe that homeowner garbage poses any risk of exporting the Medfly or any other fruit fly pest.

Sincerely,

ORIGINAL SIGNED BY:
HENRY J VOSS
SECRETARY

Henry J. Voss
Secretary
(916) 654-0433

cc: Megan Taylor ✓

UNIVERSITY OF CALIFORNIA. RIVERSIDE

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RIVERSIDE, CALIFORNIA 92521-0127

COLLEGE OF NATURAL AND AGRICULTURAL SCIENCES
OFFICE OF THE DEAN

DIVISION OF AGRICULTURE AND NATURAL RESOURCES
OFFICE OF THE DIRECTOR OF PROGRAMS
Citrus Research Center and Agricultural Experiment Station
Cooperative Extension

September 2, 1992

The Honorable Steve Clute
State Assembly
State Capitol, Room 4167
Sacramento, CA 95814

Dear Steve:

Messrs. Michael McCartney and Gary W. Johnson from Mine Reclamation Corporation met with me in my office August 31. They represent Eagle Mountain Landfill and Recycling Center. They reviewed the process that would be used prior to and during transportation of waste to Eagle Mountain. The waste material will be compacted and containerized for transportation. There is no information available in the documents provided by Mine Reclamation Corporation as to whether insects such as the Mediterranean fruit fly (Medfly) could survive compaction. However, after our discussion and review of the documents, I would have to agree with Riverside County's Agriculture Commissioner, James Wallace, in that I now see no threat of Medfly escaping to infest agricultural areas in route, as long as the process described to me by Mr. McCartney is adhered to as described.

I have enclosed some documents for your information.

Sincerely,

Nick C. Toscano
Associate Dean, DANR - CE

NT:ta
cc: M. McCartney

RECEIVED
APR 12 1990

JAMES O. WALLACE
Agricultural Commissioner
Director of Weights & Measures
CALVIN C. KAMINSKAS
Assistant Commissioner

OFFICE OF
AGRICULTURAL COMMISSIONER

4080 LEMON STREET, ROOM 19
RIVERSIDE, CALIFORNIA 92501
(714) 275-3000

WEIGHTS & MEASURES
CLEMENT BENVENISTE
Sealer
(714) 275-6210

April 10, 1990

Mr. R.D. Coale, Technical Director
Mine Reclamation Corporation
Eagle Mountain Project
12-440 E. Imperial Highway, 2nd Floor
Norwalk, CA 90650

Dear Mr. Coale:

After discussions with staff from the Riverside County Waste Management Department, and review of extracts from the Draft Environmental Impact Statement/Environmental Impact Report, it appears that the provisions stipulated for the Landfill Operations at Eagle Mountain (Riverside County), Rail and Truck Transport, and Vector and Disease Control would not contribute to the artifical spread of a quarantinable pest.

In addition, if a situation would arise where quarantine regulatory action is mandated, additional precautions would be prescribed at the Processing and Transfer Stations to further prohibit the quarantined pests artifical spread.

If this office can be of further service, please let me know.

Sincerely,

James O. Wallace
Agricultural Commissioner
Director of Weights & Measures

c.c. Mr. Bob Nelson, Director Riv. Co. Waste Management
Ms. Dee Sudduth, Supervisor, Calif. Dept. of Food & Ag.

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LLEGE OF AGRICULTURAL AND
NVIRONMENTAL SCIENCES
RICULTURAL EXPERIMENT STATION
OPERATIVE EXTENSION
6) 752-0475
X: (916) 752-1537

DEPARTMENT OF ENTOMOLOGY
DAVIS, CALIFORNIA 95616-8584

January 10, 1995

Mr. Randy Scott, Planner
Environmental Team
County of San Bernardino
Planning Department
385 North Arrowhead Ave.
San Bernardino, CA 92415

Dear Mr. Scott:

This letter is in response to your inquiry, dated September 20, 1994 about issues concerning the medfly and the Rail Cycle Bolo Station Regional Landfill.

The historical pattern of medfly captures in southern California beginning with the first detection in 1975 near Culver City through the most recent finds in Ventura County is consistent with movement due to natural spread and not due to spread by human activity. If medfly spread *within the state* was due to human activity then medfly outbreaks should occur at random locations throughout the state in roughly the same frequency as the population distribution. But the historical pattern of medfly captures in southern California is clearly nonrandom with respect to population. Starting near the Pacific coast in 1975, over the last two decades the medfly has spread northward to the San Fernando Valley and Ventura county, eastward to Riverside and San Bernardino Counties and southward to Orange and San Diego Counties. If the spread was due to human activity then outbreaks should have occurred at random locations such as Bakersfield, Sacramento, Fresno or the Imperial Valley. But no medflies have ever been detected in these cities or regions. Moreover, if the spread was due to human activity then the outbreaks that did occur in the LA Basin should have occurred at random in space rather than in a progressive pattern of movement north, east and south.

Similar arguments follow on a larger scale. For example, if medfly introductions due to human activity were common then medflies should occasionally be detected in regions such as the Asia, Japan, Southeast Asia, the South Pacific and the Caribbean, most of which are far removed from known medfly-infested areas. Never in the history of any of these areas has a single medfly been detected despite the enormous amount of air and marine travel and commerce that occurs between these areas and medfly infested regions such as Europe, South and Central America and Hawaii.

Thus the two main scientific points are: i)introductions into new regions that ultimately result in medfly colonizations and outbreaks are extremely rare; and ii)within state spread that

results in adjacent regions becoming infested is due to natural movement and not to movement by humans. These two points are neither contradictory nor inconsistent. For example, a single match may start a forest fire but the rate and direction of the fire spread is almost always due to conditions that, at least in the immediate sense, are completely independent of human activity.

Two additional points that are relevant to the Rail Cycle proposal The first point concerns the status of the medfly infestation throughout the Los Angeles Basin. I believe that the medfly infestation currently extends from as far north as Ventura and possibly Santa Barbara Counties, as far east as San Bernardino and Riverside Counties and as far south as San Diego County. Any new medfly discoveries in San Bernardino County in the near future would be due to existing low-level populations present in the area and not due to reintroductions. The second point concerns the ability of medflies to survive the overall process involved in landfill transport and treatment. I agree with Mr. Henry Voss, Secretary of the California Department of Food and Agriculture, in his letter to Ms. Donn Zea dated August 24, 1994, that the combined actions of compaction and burial will destroy virtually all medfly pupae and that homeowner garbage poses virtually no risk of exporting the medfly.

Sincerely yours,

James R. Carey
Professor

cc M. Taylor

REFERENCES

Carey, J. R. Establishment of the Mediterranean fruit fly in California. Science 253:1369-1373.

Carey, J. R. 1992. The Mediterranean fruit fly in California: taking stock. California Agriculture 46 (1):12-17.

Carey, J. R. The incipient medfly population in southern California: implications for invasion biology. Ecology (accepted)

Appendix R
Additional PUC Railroad Information

ADDRESS ALL COMMUNICATIONS
TO THE COMMISSION
107 SOUTH BROADWAY, ROOM 510
LOS ANGELES, CA 90012
TELEPHONE:

Public Utilities Commission

STATE OF CALIFORNIA

July 12, 1996

FILE NO.
183/37&42/Form J/GO 75-C

F95700 - EAGLE MTN

Mr. Roland P. Hizon
Associate Transportation Engineer
DKS Associates
2700 North Main Street, Suite 900
Santa Ana, CA 92701

Dear Mr. Hizon:

Please find enclosed the following information which you requested from the Commission staff:

PUC GENERAL ORDER AND/OR ITEM	PERTAINING TO
General Order 75-C	Regulations governing the protection of crossings.
Form J	San Diego and Santa Barbara Counties

If you have any further questions please feel free to contact me at the above address or at (213) 897-9492.

Very Truly Yours,

Hani Moussa

Hani S. Moussa
Transportation Engineer
Safety & Enforcement Division

Enclosures

DKS ASSOCIATES
A#/P#_____
COPY TO: _____ _____
_____ _____
_____ _____
ORIGINAL: FILE _____
DESTROY_____
OTHER_____

JUL 15 '96

CODING DESIGNATIONS

Columns

1 - 3 Public Utilities Commission Number - (This letter or number has been given by the Commission and may be found in the Commission's Form "M"). Mileposts having a suffix are decoded as follows:

A - A separation with the highway over the railroad
B - A separation with the highway under the railroad
C - Industrial (spur) track
D - Pedestrian or alley crossing
AC - A separation with the highway over a spur track
BC - A separation with the highway under a spur track
CD - A pedestrian or alley crossing over a spur track

An asterisk * after the PUC number indicates a crossing authorized but not reported as installed.

4 County Code (Found in Form "M")

5 City Code (Within county)

6 Jurisdiction of Street or Road

1. City
2. City/State
3. State
4. City/County
5. County
6. County/State
7. Federal or State (Other than Division of Highways)
8. City or Industry (Private Crossings)
9. Doubtful
10. Rapid Transit District

7 Number and type of tracks. An E in the M Column is used to indicate those spur track crossings which have been declared "Exempt" crossings. The following identify the heading:

M Main line
B Branch main line
P Passing
SI Siding or Drill
SP Industrial (Spur)
Y Y or X-over

Columns

8 Protection (See General Order No. 75-C).

Number and Type - For fixed signs - Type may denote:

1 - Crossbuck
1D - Pedestrian sign
1R - Reflectorized crossbuck
2 - Overhead sign

- For automatic protection-Type may denote:

2 - Non-standard, generally traffic signals
3 - Wigwag (side of street installation)
4 - Wigwag (center of street installation)
5 - Flashing light with stop banner (side of street installation)
6 - Flashing light with stop banner (center of street installation)
7 - Wigwag with flashing lights
8 - Flashing lights
8A - Flashing lights with extra lights on cantilever arm
8B - Flashing lights on cantilever arm (no lights on mast)
9 - Automatic gates
9A - Automatic gates with extra lights on cantilever arm
9B - Automatic gates with extra lights on cantilever arm (no lights on mast)
10 - Flashing lights for pedestrian crossing

Note: Types 3, 4, 5, 6 and 7 are no longer standard but may continue to be used until replaced.

Date: Date automatic protection installed (year-month-day).

9 Highway System:

1 - FAI and FAP Rural
2 - FAS Rural
3 - Non-FA Rural
4 - FAI and FAP Type I Urban Extension
5 - FAP Type II
6 - FAS Urban
7 - Non-FA Urban
8 - FA Urban System (when defined)

10 Daily Volume Highway - Average daily vehicular traffic.

11 Daily Volume Railroad - Average daily railroad traffic.

12 Control - Internal control number for computer use only.

San Diego #37

37 SAN DIEGO
9 Carlsbad
1 Chula Vista
2 Coronado
11 Del Mar
3 El Cajon
4 Escondido
10 Imperial Beach
5 La Meca
6 National City
7 Oceanside
* 8 San Diego
12 San Marcos#
13 Vista#

38 SAN FRANCISCO
* 1 San Francisco

39 SAN JOAQUIN
6 Escalon
1 Lodi
2 Manteca
5 Ripon
* 3 Stockton
4 Tracy

40 SAN LUIS OBISPO
1 Arroyo Grande
5 Grover City
6 Morro Bay#
2 Paso Robles
4 Pismo Beach
* 3 San Luis Obispo

41 SAN MATEO
1 Atherton
2 Belmont
18 Brisbane
3 Burlingame
14 Colma
4 Daly City
17 Half Moon Bay
5 Hillsborough
6 Lawndale
7 Menlo Park
13 Millbrae
16 Pacifica
19 Portola Valley#
* 8 Redwood City
9 San Bruno
10 San Carlos
11 San Mateo
12 South San Francisco
15 Woodside

42 SANTA BARBARA
5 Carpinteria#
4 Guadalupe
1 Lompoc
* 2 Santa Barbara
3 Santa Maria

43 SANTA CLARA
1 Alviso
10 Campbell
13 Cupertino
2 Gilroy
12 Los Altos
14 Los Altos Hills
3 Los Gatos
11 Milpitas
15 Monte Sereno
4 Morgan Hill
5 Mountain View
6 Palo Alto
* 7 San Jose
8 Santa Clara
16 Saratoga
9 Sunnyvale

Addition. * County Seat.

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	B	P	SI	SP	Y	PROTECTION No.	Type	No.	Type	No.	Type	No.	Type	Date	HWY DAILY VOLUME HWY	RR
001E - 275.80	42	4	11TH ST	745388X	1	1			1	1		2	9							04/11/66	2030	14
001E - 275.90	42	4	10TH ST	745389E	1	1			1			2	9							04/11/66	800	14
001E - 276.00-AD	42	4	9TH ST	745390Y	1	1			1													14
001E - 276.80	42	4	MAIN ST (SR 166)	745391F	3	1			1	1		2	9								5500	14
001E - 278.70	42		BROWN RD	745394B	5	1						2	9							03/14/67	400	14
001E - 279.50-A	42		CABRILLO HWY (SR 1)	745395H	3	1																14
001E - 283.80-A	42		BLACK RD	745398D	5	1																14
001E - 286.40	42		ASSOCIATED RD	745400C	5	1		1				2	9							03/25/68	200	14
001E - 287.20-A	42		LOMPOC-CASMALIA RD	745402R	5	1																14
001E - 321.10	42		JALAMA RD	745541L	5	1						2	9							02/16/72	200	14
001E - 339.80-B	42		GAVIOTA STATE BEACH		3	1																14
001E - 348.00-B	42		REFUGIO STATE BEACH	745568V	3	1														08/15/74		14
001E - 350.80-B	42		EL CAPITAN STATE BEACH	745570W	3	1														06/05/78		14
001E - 356.30-A	42		AMIN OIL USA OH		8	1														11/26/56		14
001E - 357.10	42		HASKELL BEACH RD	745578B	5	1						2	8							10/07/57	637	18
001E - 357.80-A	42		HOLLISTER AV	745579H	5	1																14
001E - 359.90-A	42	2	STORKE RD	745581J	5	1														01/30/62		14
001E - 360.90-A	42		LOS CARNEROS RD	745582R	5	1														07/12/68		14
001E - 362.10-A	42		FAIRVIEW AV OH	745583X	5	1														06/03/69		16
001E - 363.20-A	42		WARD MEMOR (SR 217) BL	745585L	3	1																
001E - 363.50-A	42		PATTERSON AV OH	745587A	5	1																
001E - 363.66-BD	42		MARIA YGNACIA CREEK	903146N	5	1														07/14/78		
001E - 364.60-A	42		TURNPIKE RD OH	745588G	3	1														07/03/75		16
001E - 365.70-B	42		HOLLISTER AV	745589N	5	1																16

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	B	P	SI	SP	Y	PROTECTION No.	Type	No.	Type	No.	Type	No.	Type	Date	HWY DAILY VOLUME HWY	RR
001E - 366.70-A	42	2	LA CUMBRE RD OH	745590H	1	1														08/01/57		16
001E - 368.00-A	42	2	LAS POSITAS RD(SR 225) OH	745591P	3	1															655	16
001E - 368.30-AD	42	2	JUNIPERO ST PED OH	745592W	3	1														08/01/57		16
001E - 368.76-B	42	2	MISSION ST UP	745593D	1	2														12/05/63		16
001E - 369.25-A	42	2	MICHELTORENA ST	745594K	3	2														03/15/63		16
001E - 369.54-AD	42	2	ANAPAMU ST OH	745595S	3	2														04/12/63		16
001E - 369.74-B	42	2	CARRILLO ST UP	745596Y	3	2														05/21/63		16
001E - 370.00-AD	42	2	ORTEGA ST OH	745597F	3	2														02/21/63		16
001E - 370.35-B	42	2	CASTILLO ST UP	745598M	3	2														12/31/63		16
001E - 370.60	42	2	MONTECITO ST	745599U	1	2						1	9	1	9A					08/20/73	4000	16
001E - 370.70	42	2	CHAPALA ST	745600L	1	2						2	9							06/27/73	3700	16
001E - 370.80	42	2	STATE ST	745601T	1	2						2	9							02/29/56	8400	16
001E - 370.90	42	2	ANACAPA ST	745603G	1	2						1	9	1	9A					08/02/73	3300	16
001E - 371.00	42	2	SANTA BARBARA ST	745604N	1	2						2	9							12/12/72	1700	16
001E - 371.65-C	42	2	SALSIPUEDES ST	745605V	1					1										06/01/75		
001E - 371.74-C	42	2	QUINENTOS ST	745606C	1					1										06/01/75		
001E - 371.80	42	2	MILPAS ST	745614U	1	2						2	9							08/28/73	6800	16
001E - 372.00-C	42	2	MONTECITO ST	745613M	1					1		2	1R							07/01/75	3300	2
001E - 372.05-AC	42	2	US 101		1					1												
001E - 372.22-C	42	2	SALISPUEDES ST	745612F	1					1		1	1R							07/01/75	2900	2
001E - 372.80-B	42	2	LOS PATOS WAY	745615B	1	1																16
001E - 373.00-B	42	2	CABRILLO ST (SR 225)	745616H	3	1																16
001E - 373.40-D	42	2	BUTTERFLY LN	745617P	1	1						1	1									16
001E - 373.90	42		OLIVE MILL RD	745618W	5	1						2	9							01/23/67	2800	16

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	TRACKS B	TRACKS P	TRACKS SI	TRACKS SP	TRACKS Y	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	Date	HWY DAILY VOLUME HWY	HWY DAILY VOLUME RR
001E - 374.40	42		EUCALYPTUS LN	745619D	5	1						2	9							01/23/67	1000	16
001E - 374.80	42		POSILIPO LN	745622L	5	1						2	9							03/24/69	400	16
001E - 376.10	42		LOOKOUT PARK RD	745623T	5	1						2	9							07/03/67	300	16
001E - 376.30	42		PRIVATE ROAD		8	1						1	1									
001E - 376.41	42		FINNEY ST	745626N	5	1						2	9							08/18/77		18
001E - 377.20-A	42		PADARO LANE OH		3	1		1												08/02/68		16
001E - 379.10	42		PADARO LANE	745628C	5	1						2	9							05/03/67	465	18
001E - 379.60-X	42		SANDPOINT RD. (PRIVATE)	745629J	8	1						2	1R	1	3							18
001E - 381.20	42	5	LINDEN AV	745632S	1	1						2	9							08/26/68	3500	18
001E - 381.50	42	5	PALM AV (SR 224)	745633Y	3	1						1	9	1	9A					08/03/70	700	18
001E - 382.23-X	42		CHEVRON U.S.A.	745634	8	1						2	9									
001E - 383.90-A	42		WAVE (SR 101) OH		3	1														11/01/70		16
001EH - 303.50	42		OCEAN PARK RD	745407A	5		1					1	1							03/02/49	170	4
001EH - 306.30	42		RENWICK AV	745409N	5		1					2	1R								30	4
001EH - 307.60	42		UNION SUGAR AV	745411P	5		1		1			2	9							07/23/74	500	4
001EH - 308.20	42		ARTESIA AV	745412W	5		1					2	1								60	4
001EH - 308.70	42		DEWOLFE AV	745414X	5		1					2	1								70	4
001EH - 309.30	42		DOUGLAS AV	745415S	5		1					1	1								30	4
001EH - 309.70	42		LEEGE AV	745416Y	5		1					1	1R								40	4
001EH - 310.30	42		FLORADALE AV	745417F	5		1					2	9							01/23/75	1350	4
001EH - 310.70	42		BAILEY AV	745418M	5		1														70	4
001EH - 311.30	42	1	V ST	745419U	1		1				1	2	1R								200	4
001EH - 311.40	42	1	U ST	745420N	1		1				1										600	4
001EH - 311.50-D	42	1	12TH & ALLEY	745423J	1		1					2	1R							10/01/76		4

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	B	P	SI	SP	Y	PROTECTION No.	Type	No.	Type	No.	Type	No.	Type	Date	HWY DAILY VOLUME HWY	RR
001EH - 311.57-C	42	1	LAUREL AV	745421V	1					1		1	1								1000	2
001EH - 311.57-D	42	1	ALLEY BETWEEN R & U ST		1		1			2		1	1							10/01/76	10	8
001EH - 311.59-C	42	1	LAUREL AV	745422C	1					1										11/06/69	1000	2
001EH - 311.60	42	1	R ST	745424R	1		1					2	1R								200	4
001EH - 311.61-CD	42	1	ALLEY BETWEEN R & U ST		1					1												
001EH - 311.70	42	1	Q ST	745425X	1		1					2	1								200	4
001EH - 311.75	42	1	O ST		1		1					2	1								600	4
001EH - 311.77-D	42	1	ALLEY BETWEEN N & O ST	745426E	1		1														10	4
001EH - 311.80	42	1	N ST	745427L	1		1					2	1								600	4
001EH - 311.85-D	42	1	ALLEY BETWEEN M & N ST		1		1														5	4
001EH - 311.90	42	1	M ST	745428T	1		1					2	1R								30	4
001EH - 311.92-D	42	1	ALLEY BETWEEN L & M ST	745429A	1		1														10	4
001EH - 311.95	42	1	L ST	745430U	1		1					1	1R								100	4
001EH - 311.97-D	42	1	ALLEY BETWEEN K & L ST	745431B	1		1														10	4
001EH - 312.00	42	1	K ST	745432H	1		1					2	1R								600	4
001EH - 312.04-D	42	1	ALLEY BETWEEN J & K ST	745433P	1		1														10	4
001EH - 312.10	42	1	J ST	745434W	1		1														50	4
001EH - 312.15-D	42	1	ALLEY BETWEEN I & J ST	745435D	1		1														10	4
001EH - 312.20	42	1	I ST	745436K	1		1					1	1								600	4
001EH - 312.22-D	42	1	ALLEY BETWEEN H & I ST	745437S	1		1														30	4
001EH - 312.25	42	1	H ST (SR 1)	745438Y	3		1					2	8								19346	4
001EH - 312.29-D	42	1	ALLEY BETWEEN G & H ST	745439F	1		1					1	1							12/01/32	10	4
001EH - 312.30	42	1	G ST	745440A	1		1					2	1								1000	4
001EH - 312.35	42	1	ALLEY BETWEEN F & G ST		1		1													10/01/76	10	4

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	TRACKS B	TRACKS P	TRACKS SI	TRACKS SP	TRACKS Y	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	Date	HWY DAILY VOLUME HWY	HWY DAILY VOLUME RR
001EH - 312.40	42	1	F ST	745441G	1		1					1	1								1000	6
001EH - 312.45-D	42	1	ALLEY BETWEEN E & F ST	745442N	1		1														10	6
001EH - 312.50	42	1	E ST	745443V	1		1			1											731	6
001EH - 312.60	42	1	D ST	745445J	1		1		1	2		2	1R								1210	10
001EH - 312.80	42	1	A ST	745446R	1		1		1	1		4	9							07/24/67	2500	14
001EH - 313.00	42	1	3RD ST	745447X	1		1					1	1								1000	4
001EH - 313.20	42	1	7TH ST	745448E	1		1					1	8	2	8A					02/04/92	3958	2
001EH - 313.50-C	42		12TH ST	745450F	5		1			2		2	1								600	2
001EHA- 313.10	42	1	CHESTNUT AV & A ST	745452U	1		1					3	8A							08/06/79	1000	4
001EHA- 313.20-D	42	1	DRIVEWAY X-OVER		1		1															4
001EHA- 313.30	42	1	WALNUT AV	745454H	1		1					1	1								600	4
001EHA- 313.32-D	42	1	DRIVEWAY X-OVER		1		1															4
001EHA- 313.35-D	42	1	DRIVEWAY X-OVER		1		1															4
001EHA- 313.37-D	42	1	ALLEY BET WAL & OCEA	745457D	1		1															4
001EHA- 313.40	42	1	OCEAN AV (SR 1)	745458K	3		1					2	8								6000	4
001EHA- 313.41-D	42	1	DRIVEWAY X-OVER		1		1															4
001EHA- 313.45-D	42	1	ALLEY BET OCEAN & CYPRE	745462A	1		1															4
001EHA- 313.47-D	42	1	DRIVEWAY X OVER		1		1															4
001EHA- 313.50	42	1	A ST & CYPRESS AV	745463G	1		1					3	8A							09/25/79	1500	4
001EHA- 313.55-D	42	1	ALLEY BETWEEN A & B ST	745464N	1		1														10	4
001EHA- 313.60	42	1	B ST & HICKORY AV	745465V	1		1					4	1R							01/04/56	400	4
001EHA- 313.70-D	42	1	ALLEY BETWEEN B & C ST	745466C	1		1					2	1								10	4
001EHA- 313.80	42	1	OLIVE AV & C ST	745467J	1		1					4	1								500	2
001EHA- 313.85-D	42	1	ALLEY BETWEEN C & D ST	745468R	1		1					1	1R								10	4

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	TRACKS B	TRACKS P	TRACKS SI	TRACKS SP	TRACKS Y	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	Date	HWY DAILY VOLUME HWY	HWY DAILY VOLUME RR
001EHA- 313.87	42	1	D ST	745469X	1		1					1	1								600	4
001EHA- 313.90	42	1	LOCUST AV	745470S	1		1					2	1								600	4
001EHA- 313.95	42	1	E ST	745471Y	1		1					2	1								600	4
001EHA- 314.10	42	1	G ST	745472F	1		1					2	1C								10	4
038 - 2.20	42		BROWN RD	856603N	5	1						2	9							06/06/78	400	12
038 - 4.20-C	42		BETTERAVIA RD	856610Y	5					1		2	1R								700	4
038B - 0.10	42		BETTERAVIA RD	856612M	5	1						2	9							06/13/78	700	12
038B - 0.70	42		RAY RD	856615H	5	1						2	1R								100	72
038B - 1.40	42		STINTON RD	856616P	5	1			1			2	8							12/31/49	600	12
038B - 2.60	42		BLACK RD	856620E	5	1				1		2	9							08/31/76	600	12
038B - 4.30	42	3	STOWELL RD	856624G	1	1						2	8							08/17/65	3000	12
038B - 5.00	42	3	BLOSSER RD	856627C	1	1						2	9A							01/23/73	11400	12
038B - 5.25	42	3	SOUTH WESTERN AV	856657P	1	1						2	9							04/14/88		
038B - 5.60	42	3	DEPOT ST	856635U	1	1				2		4	9							06/30/69	3000	12
038B - 5.65	42	3	SMITH ST	856636B	1	1				1		2	1								1500	12
038B - 5.70	42	3	CURRYER ST	856637H	1	1			1			2	1R								1500	12
038B - 5.70-C	42	3	BOONE ST	856633F	1					1		2	1R								1500	2
038B - 5.75	42	3	THORNBURG ST	856638P	1	1						1	1								500	12
038B - 5.77-D	42	3	ALLEY	856639W	1	1						1	1								10	12
038B - 5.80	42	3	PINE ST	856640R	1	1						2	1R								1000	12
038B - 5.80-C	42	3	W ORANGE ST	856632Y	1					1		2	1								1000	2
038B - 5.84-C	42	3	COOK ST	856631S	1					1		2	1R								2500	2
038B - 5.85-D	42	3	ALLEY	856641X	1	1						1	1								10	12
038B - 5.90	42	3	LINCOLN ST	856642E	1	1						2	8							12/18/58	2500	12

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	B	P	SI	SP	Y	PROTECTION No.	Type	No.	Type	No.	Type	No.	Type	Date	HWY DAILY VOLUME HWY	RR
038B - 5.90-C	42	3	CYPRESS	856630K	1					1		2	1								2000	2
038B - 6.00	42	3	BROADWAY (SR 135)	856643L	3	1						4	9							01/22/70	26500	12
038B - 6.00-C	42	3	CHURCH ST	856629R	1					1		2	1								700	2
038B - 6.05-D	42	3	ALLEY BET BROAD & MC	856644T	1	1						1	1R								10	12
038B - 6.10	42	3	MCCLELLAND ST	856645A	1	1						2	1R								2800	12
038B - 6.10-C	42	3	MAIN ST (SR 166)	856628J	3					1		2	1								18800	2
038B - 6.30	42	3	MILLER ST	856646G	1	1		1	2	2		2	9A							09/01/77	3000	16
038B - 6.60	42	3	COLLEGE DR	856649C	1	1				1		4	8							08/26/66	6600	4
038B - 7.00	42	3	BRADLEY RD	856650W	1	1						2	9							03/18/81	4000	2
038B - 7.10-A	42		SR 101 OH	856651D	3	1			1													2
038B - 7.60	42		SUEY RD	856653S	5	1						2	1R								705	2
038B - 8.00-C	42		JONES ST	856654Y	5					1		2	1								700	2
038B - 8.10-C	42		ROSEMARY RD		5					1		1	1								250	2
038B - 9.00-C	42		ROSEMARY RD		5					1										10/30/52	250	2
038C - 0.30	42	3	MORRISON ST	856675S	1		1					2	8							01/01/86	2000	2
038C - 0.60	42	3	W STOWELL RD	856676Y	1		1					2	9A							01/24/73	3000	2
038C - 1.80	42	3	BETTERAVIA RD	856679U	1		1					2	9A							08/20/87	8500	2
038C - 1.90-C	42	3	MORGANTI SPUR -ALLEY	856680N	1		1					2	1R								100	2
038C - 2.10	42	3	MCCOY LN	856681V	1		1					2	9A							10/12/88	1000	2
038C - 2.60-C	42	3	INDUSTRIAL PKWY	856685X	1		1					2	1R								300	2

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002 - 209.50-A	37		I-5 OH	026803G	3	1		1													50000	10
002 - 209.60-C	37		SAN ONOFRE ST BEACH		3					1												
002 - 215.70-A	37		AGRA (SR 5) OH	026804N	3	1																10
002 - 217.30-B	37		LAS PULGAS RD	026806C	5	1															30000	10
002 - 221.40-A	37		COCKLEBURR OH	026807J	3	1																10
002 - 222.60-A	37		STUART (SR 5) OH	026808R	3	1																10
002 - 223.80-AC	37		FALLBROOK (SR 5) OH		3					1												8
002 - 223.90-A	37		FALLBROOK (SR 5) OH	026809X	3	1																10
002 - 224.50-A	37		I-5 OH	026810S	3	1															50000	10
002 - 225.00-A	37		HARBOR DR		1	1																10
002 - 225.20-A	37	7	HARBOR DR	026811Y	1	1														12/09/74		10
002 - 225.30-B	37	7	PEDESTRIAN UP	026812F	1	1																10
002 - 225.90	37	7	6TH ST	026813M	1	1						2	9							10/18/71	5000	10
002 - 226.40	37	7	MISSION AV	026815B	1	1		1	4			2	8	2	9					05/04/81	2000	10
002 - 226.80	37	7	WISCONSIN ST	026816H	1	1		1				2	9							05/03/73	5000	10
002 - 227.20	37	7	OCEANSIDE BL	026817P	1	1	1					2	9							05/31/73	6000	10
002 - 228.00	37	7	CASSIDY	026818W	1	1						2	9							01/24/74	6000	10
002 - 228.90-A	37	9	CARLSBAD BL OH	026819D	1	1		1														10
002 - 229.20	37	9	GRAND AV	026820X	1	1		1				2	9A							03/31/73	2000	10
002 - 229.30	37	9	CARLSBAD VILLAGE DR.	026821E	1	1		1				2	9A							03/31/73	10000	10
002 - 230.10	37	9	TAMARACK AV	026822L	1	1						2	8	2	9					03/31/73	3000	10
002 - 231.40	37	9	CANNON RD	026824A	1	1						4	9							03/21/73	2500	10
002 - 232.20-A	37	9	PALOMAR AIRPORT OH	026825G	3	1															4500	10
002 - 233.40-A	37	9	POINSETTIA LN OH		1	1																

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	B	P	SI	SP	Y	PROTECTION No.	Type	No.	Type	No.	Type	No.	Type	Date	HWY DAILY VOLUME HWY	RR
002 - 234.10-A	37	9	AVENIDA ENCINAS OH		1	2																
002 - 235.10-A	37		LA COSTA OH	026826N	5	1															3700	10
002 - 236.50	37		LEUCADIA BL	026827V	5	1						2	9							10/19/67	6400	10
002 - 237.70-B	37		ENCINITAS BL	026828C	5	1																10
002 - 237.90	37		D ST	026829J	5	1						2	9							05/26/66	3200	10
002 - 237.95	37		E ST	026830D	5	1						2	9							05/26/66	6600	10
002 - 239.80	37		CHESTERFIELD	026849V	5	1			1			2	9							04/10/69	11900	10
002 - 241.80	37		LOMAS SANTE FE	026831K	5	1						2	9A							10/25/84	13600	10
002 - 242.70-A	37		VIA DE LA VALLE	026832S	5	1															7000	10
002 - 243.60-A	37	11	CAMINO DELMAR OH	026833Y	1	1		1														10
002 - 244.10	37	11	COAST BL	026834F	1	1						4	1D	2	9A					10/28/90	5000	10
002 - 244.50-AD	37		PED OH		5	1																
002 - 245.60-A	37	11	CAMINO DEL MAR (SR 21)	026835M	3	1																10
002 - 248.90-A	37	8	SORRENTO OH (SR 5)	026836U	3	1															2500	10
002 - 249.04-A	37	8	SORRENTO OH (SR 5)	026837B	3	1															2500	10
002 - 249.10	37	8	SORRENTO VALLEY BL		1	1		1				1	8	2	9	1	9A			09/30/64	5000	10
002 - 250.70-A	37	8	SR 805 OH	026840J	3	1															2500	10
002 - 252.90-A	37	8	MIRAMAR OH	026841R	1	1															7500	10
002 - 253.75-C	37	8	FROSTMAR PL	026951B	1					1		2	1R									
002 - 253.78-C	37	8	CONSOLIDATED	026953P	1					1		2	1R								100	
002 - 253.80-C	37	8	MIRAMAR RD	026955D	1					1		4	9							01/26/77	8000	
002 - 253.88-C	37	8	CONSOLIDATED WAY	026727R	1					1		2	1R							10/30/75		
002 - 253.90-C	37	8	PRODUCTION AV	026956K	1					1		2	8							03/07/74		
002 - 253.99-C	37	8	CONSOLIDATED WAY	026954W	1					1		2	1R								100	

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002 - 254.08-C	37	8	DISTRIBUTION AV	026957S	1					1		2	8							03/07/74		
002 - 254.20-A	37	8	SR 805 OH	026842X	3	1																
002 - 254.31-C	37	8	DISTRIBUTION AV	026958Y	1				1			2	8							12/18/73		
002 - 254.63-C	37	8	CARROLL RD	026959F	1				1			2	9							08/09/73		
002 - 254.67-C	37	8	TRADE ST	026613D	1					1		2	8A							08/30/79		
002 - 254.90-C	37	8	KENAMAR DR		1					1										08/22/85		
002 - 255.40-C	37	8	DOWDY DR		1					1		2	9							02/25/88		
002 - 255.50-A	37	8	GENESEE AV	026843E	1	1																
002 - 255.58-C	37	8	CABOT DR	026967X	1				1			2	8							09/29/76		
002 - 257.85-A	37	8	ARSIX OH (SR 52)		3	1															2500	8
002 - 257.87-A	37	8	SR 52 OH		3	1															2500	8
002 - 257.92-A	37	8	SR 52 OH		3	1															2500	8
002 - 257.95-A	37	8	SR 52 OH		3	1															2500	8
002 - 257.96-A	37	8	SR 52 OH	026844L	3	1															2500	8
002 - 259.00-C	37	8	MORENA BL	026249A	1					1		2	1R							09/01/66	5000	8
002 - 259.60-C	37	8	SANTA FE AV	026950U	1					1		2	1R									
002 - 260.50-B	37	8	BALBOA AV	026845T	1	1															21000	8
002 - 261.70-A	37	8	CLAIREMONT DR OH	026846A	1	1															15000	8
002 - 263.10-A	37	8	TECOLITE RD/S W DR OH	026848N	3	1															15000	8
002 - 263.70-B	37	8	FRIARS RD UP	026850P	1	1															5500	8
002 - 263.89-A	37	8	SR 8 OLD TOWN OH	026851W	3	1														07/21/69		
002 - 263.91-A	37	8	SR 5 TO SR 8 E OH		3	1														07/21/69	21000	8
002 - 264.20	37	8	TAYLOR ST	026852D	1	1		1	2												16600	24
002 - 264.25-P	37	8	PEDESTRIAN UP		1	1			2													
002 - 264.30-A	37	8	SR 5 OH	026853K	3	1		1	2											06/28/67	21000	8

Crossing No.	Cnty	City	Local Name	DOT No.	TRACKS Jur	TRACKS M	TRACKS B	TRACKS P	TRACKS SI	TRACKS SP	TRACKS Y	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	HWY DAILY VOLUME Date	HWY DAILY VOLUME HWY	HWY DAILY VOLUME RR
002 - 265.00-B	37	8	WITHERBY ST UP	026854S	1	1		1	2												2500	8
002 - 265.20-C	37	8	WRIGHT ST	026855Y	1					1		1	1							06/04/46	1000	8
002 - 265.40	37	8	NOELL ST	026856F	1	2						3	8	1	9	2	9A			05/17/76	1400	8
002 - 265.50-C	37	8	WASHINGTON ST	026947L	1					1		4	8							10/23/58	15900	8
002 - 265.55-AC	37	8	WASHINGTON ST OH	026945X	1					1										10/23/58	21000	8
002 - 265.60	37	8	WASHINGTON ST	026857M	1	2				2		2	8	2	9A					04/22/68	20000	8
002 - 265.60-C	37	8	WASHINGTON ST	026946E	1					1	1	1	9	3	9A					09/17/87	20000	8
002 - 265.80	37	8	VINE ST	026858U	1	2				2		2	9							04/27/78	2500	8
002 - 265.80-C	37	8	WASH ST OFF RAMP	026944R	1						1	2	8							10/23/58	20000	8
002 - 266.10	37	8	SASSAFRAS ST	026859B	1	2				2		3	8	1	9	2	9A			12/03/69	10000	8
002 - 266.20-A	37	8	SR 5 OH	026860V	3	2				2											2500	8
002 - 266.40	37	8	PALM ST	026861C	1	2				2		2	8	1	8A	1	9	1	9A	12/02/69	3200	8
002 - 266.55-C	37	8	NUTMEG ST	026862J	1					2		2	1								1000	8
002 - 266.56-C	37	8	CALIFORNIA ST		1					1		1	1								1000	8
002 - 266.60	37	8	LAUREL ST	026863R	1	2				2		2	8	1	9	2	9A			12/02/69	13500	8
002 - 266.60-B	37	8	LAUREL ST UP		1																	
002 - 266.61-C	37	8	LAUREL ST & PACIFIC HWY		1					1		3	8								13500	
002 - 266.64-C	37	8	PALM ST		1					1		2	1								2000	
002 - 266.78-C	37	8	LAUREL ST		1					1												
002 - 266.90	37	8	HAWTHORN ST	026866L	1	2						2	8	2	9A					09/16/71	10100	8
002 - 266.90-A	37	8	HAWTHORN ST OH		1	2																
002 - 267.00	37	8	GRAPE ST	026867T	1	2						2	8	1	9	2	9A			09/16/71	16800	8
002 - 267.00-A	37	8	GRAPE ST OH		1	2																
002 - 267.20	37	8	CEDAR ST	026868A	1	2			2			2	9	1	9A					11/12/75	2000	8
002 - 267.25	37	8	BEECH ST	026869G	1	2			2			1	9	1	9A					11/12/75	2000	8

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002 - 267.30	37	8	ASH ST	026870B	1	2			2			3	9	2	9A					06/30/71	10000	8
002 - 267.56-C	37	8	ATLANTIC ST & PAC HWY	026932W	1					1		2	1R								10000	2
002 - 267.60	37	8	BROADWAY	026871H	1	1			3			1	8	4	9					03/21/66	16000	4
002 - 267.66-C	37	8	PAC HWY	026929N	1					1		2	1								10000	2
002 - 267.71-C	37	8	HARBOR & BROADWAY		1					1											16000	2
002 - 267.75-C	37	8	PAC HWY @ E ST	026930H	1					1		2	1								13000	2
002 - 267.76-C	37	8	HARBOR ST	026933D	1					3		1	1								13000	2
002 - 267.78-C	37	8	PAC HWY		1					2		2	1								10000	2
002 - 267.80	37	8	KETTNER BL & G ST	026874D	1	2						1	8	4	9A					08/22/68	15000	4
002 - 267.80-C	37	8	G ST & CALIFORNIA ST		1					3		1	1								6000	2
002 - 267.82-C	37	8	E ST	026925L	1					1		2	8A							03/25/88		2
002 - 267.84-C	37	8	PACIFIC HWY		7					1		2	8A							03/25/88		
002 - 267.89-C	37	8	HARBOR ST & E ST		1					4		1	1								13000	4
002 - 267.90	37	8	MARKET ST	026875K	1	2				1		2	8	3	9	1	9A			10/16/69	15000	4
002 - 267.98-C	37	8	INDIA ST		1					1		1	1R									1
002 - 268.10-C	37	8	UNION & ISLAND AV	026934K	1					1		2	1								1000	2
002 - 268.13-C	37	8	FRONT & ISLAND AV	026935S	1					1		1	1								1000	2
002 - 268.20	37	8	FRONT ST		1	3						2	8	1	9	1	9A					
002 - 268.30	37	8	FIRST AVE		1	3						2	8	1	9	1	9A					
002 - 268.34-C	37	8	3RD AV & K ST	026937F	1					2		2	1								1000	2
002 - 268.38-C	37	8	1ST & ISLAND AV	026936Y	1					2		2	1R								1000	2
002 - 268.39-C	37	8	4TH AV & K ST	026938M	1					2		2	1								1000	6
002 - 268.50	37	8	FIFTH AV	026878F	1	3						2	8	3	9	1	9A			05/19/82	7400	4
002 - 268.64-C	37	8	8TH AV & IMPERIAL AV	026942C	1					3		3	1								2000	2
002 - 268.66-C	37	8	HARBOR DR @ 7TH AV	026923X	1					1		2	1R								1000	2

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002 - 268.68-C	37	8	9TH AV & IMPERIAL AV	026943J	1					2		2	1								2000	2
002 - 268.70	37	8	8TH AV	026879M	1	3			1	1		1	8	3	9					07/21/82	7000	4
002 - 268.71-C	37	8	IMPERIAL & 8 AV		1					1		1	1R								2000	2
002 - 268.73-C	37	8	L ST @ 7TH AV	026941V	1					1		1	1								2000	2
002 - 268.76-C	37	8	8TH AV		1					1											2000	2
002 - 268.80-C	37	8	K ST @ 7TH AV	026940N	1					1		1	1R								2000	2
002 - 268.81-C	37	8	L ST @ 8TH AV		1					2		1	1R								2000	2
002 - 268.86-C	37	8	HARBOR DR @ 8TH AV	026922R	1					1		2	1R								13000	2
002 - 268.87-C	37	8	J ST @ 7TH AV	026939U	1					4		2	1								2000	2
002 - 268.90-A	37	8	HARBOR DR	026880G	1	2															15000	4
002 - 269.40	37	8	CROSBY ST	026882V	1	1				4		2	9A	1	10					03/30/93	5000	50
002 - 269.50-A	37	8	SD-CORONADO (SR 75)	026883C	1	1			1	4										08/02/69	21000	4
002 - 269.50-A	37	8	SD-CORONADO (SR 75)	026921J	1	1			1	4										08/02/69	21000	4
002 - 269.80	37	8	SAMPSON ST	026887E	1	1						2	9							08/27/71	1800	4
002 - 269.88-C	37	8	BELT ST	026886X	1					2		2	1								1000	2
002 - 270.00-C	37	8	BELT ST	026917U	1					1		2	1R								1000	2
002 - 270.16-C	37	8	SAMPSON ST	026919H	1					1		2	1								1800	2
002 - 270.20	37	8	HARBOR DR @ BELL	026889T	1	1						2	9	1	9A					03/22/78	13000	4
002 - 270.40	37	8	28TH ST	026890M	1	1						2	8	2	9					10/02/69	8000	4
002 - 270.50-C	37	8	HARBOR DR NR 28TH ST		1					1		4	1R								13000	2
002 - 270.85-C	37	8	HARBOR DR	026892B	1					1		4	8							08/25/61	13000	2
002 - 270.97-C	37	8	HARBOR DR		1					2		2	1R								13000	2
002 - 271.00	37	8	32ND ST	026894P	1	1						4	9							11/29/74	8000	4
002 - 271.03-C	37	8	28TH ST	026914Y	1					1		2	1R								8000	2

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002 - 271.20-AD	37	8	VIC HARBOR 32ND PED		7	1															15000	2
002 - 271.40-C	37	8	HARBOR DR	026896D	1					1		4	9							03/08/83	13000	2
002 - 271.50-C	37	8	HARBOR DR		1					1		2	1R								13000	2
002 - 272.10	37	6	8TH ST	026899Y	1	1						1	9	2	9A					07/27/44	10000	4
002 - 272.30	37	6	HARBOR DR	026900R	1	1						2	9	2	9A					10/30/90	20000	4
002 - 272.50	37	6	CIVIC CENTER DR	026901X	1	1						2	9							10/30/90	4000	4
002 - 272.50-C	37	6	CIVIC CENTER DR		1					1		2	9A								2000	2
002 - 272.58-C	37	6	TIDELANDS AV	026905A	1					2		2	1R								1000	2
002 - 272.60-C	37	6	15TH ST CLEVELAND		1					1		1	1R								1000	2
002 - 272.65-C	37	6	16TH ST CLEVELAND		1					1		1	1R								1000	2
002 - 272.72-C	37	6	17TH ST		1					1		2	1								1000	2
002 - 272.80	37	6	19TH ST	026902E	1	1			1	1		2	1R								3000	4
002 - 272.80-C	37	6	8TH ST		1					2		2	1								1000	4
002 - 272.87-C	37	6	19TH ST	026908V	1				2			1	1R								3000	2
002 - 272.90-C	37	6	TIDELANDS AV	026909C	1					1		2	1R								1000	2
002 - 273.00-C	37	6	TIDELANDS AV	026910W	1						1	2	1								1000	2
002 - 273.01-C	37	6	24TH ST	026911D	1					1		1	1R								2000	2
002 - 273.01-C	37	6	24TH ST	026912K	1					1		1	1R								2000	2
002 - 273.10-C	37	6	23RD ST	026903L	1					1		2	8	2	9					07/21/82	2000	2
002 - 273.15-C	37	6	TIDELANDS AV	026913S	1						1	1	1								1000	2
002 - 273.20	37	6	24TH ST	026904T	1	1			3			4	9							07/07/88	2000	4
002 - 273.20-C	37	6	24TH ST		1					1		1	1R									
002E - 0.30	37	7	HILL ST	027550E	1		1					1	8	2	9					03/15/68	15000	2
002E - 0.90-A	37	7	SR 5	027552T	3		1														21000	2
002E - 1.10	37	7	COMMERCE ST	027553A	1							1	8	2	9	1	9A			10/28/83	1000	2

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002E - 1.20	37	7	STATE TREE DR		1		1					2	9									
002E - 1.40-C	37	7	OCEANSIDE BL S	026634W	1					1		2	8A							05/12/87		
002E - 1.60	37	7	CROUCH ST	027556V	1		1					2	8							04/21/66	2000	2
002E - 2.90	37	7	EL CAMINO REAL	027557C	1		1					2	9	2	9A					09/18/70	10000	2
002E - 4.20	37	7	RANCHO DEL ORO RD	027467D	1		1					2	9	2	9A					12/16/87		
002E - 5.60	37	7	COLLEGE BL	027562Y	1		1					2	9	2	9A					03/05/82	4000	2
002E - 6.90	37	7	TEMPLE HEIGHTS DR	026994U	1		1					2	9A							02/23/82		
002E - 7.50	37	13	MELROSE DR	026993M	1		1					4	9							06/06/81		
002E - 8.00	37	13	NORTH AV	027564M	1		1					2	1R								2000	2
002E - 8.20	37	13	LOS ANGELES DR	027565U	1		1					2	1R								2000	2
002E - 9.30	37	13	WEST VISTA WY	027566B	1		1	1	1			2	8							07/30/70	4000	2
002E - 9.40	37	13	WEST BROADWAY	027567H	1		1					3	8							01/14/55	8000	2
002E - 9.60	37	13	GUAJOME ST	027568P	1		1					2	1R	1	3						2000	2
002E - 10.10	37	13	ESCONDIDO AV	027569W	1		1					2	9A							12/03/82	2000	2
002E - 11.20	37	13	MAR VISTA DR	027570R	1		1					2	9	2	9A					01/31/68	2000	2
002E - 12.00	37	13	S SANTA FE AV	027571X	1		1					2	8							01/25/68	15000	2
002E - 12.40	37	13	BUENA CREEK RD	027572E	1		1					2	9								2000	2
002E - 12.80	37		ESTRELITA DR	027573L	5		1		1	1		2	8							03/14/68	2000	2
002E - 14.60	37	12	MISSION RD	027574T	1		1					2	8	2	9					03/24/84	15000	2
002E - 14.80	37	12	LAS POSAS RD	027576G	1		1					1	8	3	9					03/14/84	2000	2
002E - 15.70	37	12	KNOLL RD	027474N	1							1	8	3	9	1	9A					
002E - 16.10	37	12	PICO AV	027577N	1		1					2	9A							03/07/84	4000	2
002E - 16.30-A	37	12	TWIN OAKS VALLEY OH		1		1													12/15/78		
002E - 16.70	37	12	VALPREDO RD	027579C	1		1					2	1R								2000	2

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002E - 17.80	37	12	WOODLAND PKWY	027580W	1		1					2	9	2	9A						2000	2
002E - 18.40	37	12	RANCHEROS DR	027581D	1		1					1	8	2	9	1	9A				2000	2
002E - 18.60-A	37		MISSION OH (SR 78)	027582K	3		1														21000	2
002E - 18.90	37	4	BARHAM DR	027583S	1		1					2	9A								2000	2
002E - 19.00	37	4	CITRACADO PKWY	027584Y	1		1			1		2	9	2	9A					03/07/66	2000	2
002E - 19.70	37	4	ENTERPRISE ST	027590C	1		1					2	9A							03/14/68	4000	2
002E - 20.10	37	4	ANDREASON DR	027593X	1		1					2	9							06/03/74		
002E - 20.29-C	37	4	WASHINGTON AV		1					1		2	1R								1000	2
002E - 20.30-A	37	4	SANTA FE AV OH	026998W	3		1													02/28/77	9000	
002E - 20.30-C	37	4	WASHINGTON AV		1					1		1	1								1000	
002E - 20.40	37	4	HALE AV	027596T	1		1		1			2	9A							10/04/68	2000	2
002E - 21.00	37	4	VALLEY PKWY	026737W	1		1					2	9A							12/17/74		
002E - 21.10	37	4	GRAND AV	027598G	1		1		1			2	9A							09/24/76	4000	2
002E - 21.20	37	4	3RD ST	027599N	1		1					2	1R								2000	2
002E - 21.30-C	37	4	QUINCE ST	026725C	1					1		1	1								1000	2
036 - 0.78-C	37	8	1ST AV & J ST	661781H	1					2		1	1								4000	
036 - 0.80-C	37	8	3RD AV	661782P	1					1		1	1								1000	
036 - 0.89-C	37	8	4TH AV & K ST	661783W	1					1		1	1								1000	
036 - 0.90	37	8	5TH AV	661784D	1	1				4		3	9	1	9A					02/27/57	7400	6
036 - 0.90-C	37	8	5TH AV & K ST	661785K	1					1		1	8								4000	
036 - 0.92-C	37	8	5TH AV & J ST		1					1		1	1								4000	
036 - 1.00-C	37	8	6TH AV & L ST	661786S	1					2		1	1								2000	
036 - 1.10-C	37	8	7TH & L ST	661787Y	1					2		1	1								2000	
036 - 1.15	37	8	8TH AV	661795R	1	1			1	1		1	8	3	9					10/22/62	5000	6

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	B	P	SI	SP	Y	PROTECTION No.	Type	No.	Type	No.	Type	No.	Type	Date	HWY DAILY VOLUME HWY	RR
036 - 1.15-C	37	8	8TH AV & L ST	661795R	1					2		1	1								5000	
036 - 1.20-C	37	8	9TH AV & L ST	661789M	1					1		1	1								1000	
036 - 1.30-C	37	8	10TH AV & L ST	661790G	1					1		1	1								1000	
036 - 1.35-C	37	8	11TH AV & L ST	661791N	1					1		1	1								1000	
036 - 1.40-C	37	8	12TH AV & L ST	661792V	1					1		1	1								4000	
036 - 1.45-C	37	8	13TH ST	661793C	1					1		2	1								5000	
036 - 1.50-C	37	8	14TH ST	661794J	1					1		2	1								1000	
036 - 1.70	37	8	SIGSBEE ST	661796X	1	1				2		2	9							06/01/81	1000	6
036 - 1.80	37	8	BEARDSLEY ST	661797E	1	1			1			2	9							06/01/81	1000	6
036 - 2.00	37	8	CROSBY ST	661798L	1	1			1	1		2	9							03/17/77	6000	6
036 - 2.02-A	37	8	SAN DIEGO CORONADO		3	1			1	1												
036 - 2.30	37	8	SAMPSON ST	661800K	1	1				2		2	9							07/01/81	2000	6
036 - 2.50	37	8	SCHLEY ST	661801S	1	1						2	9							07/01/81	3000	6
036 - 2.80	37	8	28TH ST	661802Y	1	1						4	9							04/20/81	9630	6
036 - 3.40	37	8	32ND ST	661803F	1	2						4	9							11/29/74	8000	6
036 - 3.62-AD	37	8	PED XING NR 32ND ST	661805U	6	1																6
036 - 4.60	37	6	8TH ST	661806B	1	2						2	9							04/20/81	8000	6
036 - 4.88-A	37	6	13TH ST (SR 5) OH	662158P	3	1																6
036 - 4.90	37	6	CIVIC CENTER DR	661808P	1	1						2	8	2	9					04/06/81	5000	6
036 - 5.25-B	37	6	18TH ST	662159W	1	1																6
036 - 5.61-B	37	6	24TH ST	662160R	1	1																6
036 - 6.22-A	37	6	SWEETWATER RIVER OH		3	1																
036 - 6.25-A	37	6	SR 54/5 SEP & OH - WB		3	1																
036 - 6.37-A	37	6	SR 54/5 SER & OH - EB		3	1																

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036 - 6.40-C	37	6	HOOVER AV	661809W	1					2		2	1R								1000	6
036 - 6.42-A	37	1	SWEETWATER RIVER OH		3	1																
036 - 7.10	37	1	E ST	662161X	1	1						2	9							05/22/72	15000	6
036 - 7.40	37	1	F ST	662162E	1	1						2	9A							01/27/72	10000	6
036 - 7.90	37	1	H ST	662163L	1	2						4	9							05/10/73	10000	6
036 - 8.40	37	1	J ST	662034W	1	2						2	8	2	9					11/06/72	2500	6
036 - 8.90	37	1	L ST	662036K	1	2						2	9							06/27/73	4000	6
036 - 9.10	37		MOSS ST	662035D	5	2						2	9							10/28/66	2600	6
036 - 9.40	37		NAPLES ST	662037S	5	2		1				2	9							09/21/66	4000	6
036 - 9.70	37	1	PALOMAR ST	662038Y	5	2		1				2	9A							04/20/81	15400	6
036 - 10.10	37		ANITA ST	662039F	5	1			1			2	9							05/18/81	2000	6
036 - 10.30-B	37	8	MAIN ST	662040A	1	1																6
036 - 10.30-C	37	8	MAIN ST	662041G	1				1			2	1R								13000	1
036 - 11.10	37	8	PALM AV	662042N	1	1		1	1			3	9							06/26/78	2000	6
036 - 11.80-B	37	8	CORONADO AV	662044C	1	1														09/21/76	1000	6
036 - 12.00	37	8	27TH ST	662045J	1	2						2	9							05/09/81	1000	6
036 - 12.60	37	8	IRIS AV	662046R	1	2			1			2	9							02/17/76	2000	6
036 - 12.70-A	37	8	PALM CITY OH		3	1														04/05/76		
036 - 12.90	37	8	DAIRY MART RD	662047X	1	2						2	9A							05/09/81	2000	6
036 - 13.80	37	8	SMYTHE AV	662048E	1	2						2	9							07/17/81	2000	6
036 - 14.00	37	8	SEAWARD AV	662049L	1	1						2	9							07/17/81	3000	6
036 - 14.10	37	8	PARK AV - WEST		1	1						1	9							07/17/81	1000	6
036 - 14.10	37	8	PARK AV - EAST	662050F	1	1						1	9							07/17/81		
036 - 14.33-[redacted]	37	8	I 805 FWY UP		3	1														07/09/75		

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036 - 14.40-B	37	8	E. BEYER UP	662052U	1	1														07/09/75		6
036 - 14.90	37	8	SD&IV DRIVEWAY		1							2	9									
036 - 15.20	37	8	SAN YSIDRO		1																	
036 - 60.90-B	37		SR 94 UP	662156B	3	1																4
036 - 65.40	37		CAMPO (SR 94)	662153F	3	1						2	9							01/20/72	1000	4
036 - 67.20	37		E CAMPO (SR 94)	662151S	3	1						2	9							06/24/71	900	4
036 - 69.80	37		LA POSTA RD	662150K	5	1						1	1								500	4
036 - 77.30-B	37		ROUND MT (SR 94)	662147C	3	1																4
036 - 83.50	37		TIERRA DEL SOL RD	662143A	5	1						2	1								500	4
036 - 92.00-A	37		SR 94		3	1																4
036 - 95.30-A	37		RD MOUNTAIN (SR 8) OH	661981S	3	1																4
036 - 110.90	37		DOS CABEZAS RD	661979R	5	1						2	1R								500	4
036B - 4.88-C	37	6	12TH ST		1					1		2	1R								500	4
036B - 4.93	37	6	HARBOR DR	662058K	1		1					4	8							09/27/50	13000	4
036B - 4.98	37	6	CIVIC CENTER DR	662057D	1		1					2	1R								4000	4
036B - 5.01	37	6	14TH ST & CLEVELAND AV	662059S	1		1					1	1R								2000	4
036B - 5.05	37	6	15TH ST & CLEVELAND AV	662060L	1		1														2000	4
036B - 5.16	37	6	16TH ST & CLEVELAND AV	662061T	1		1														2000	4
036B - 5.20	37	6	17TH ST	662062A	1		1														2000	4
036B - 5.25	37	6	18TH ST & CLEVELAND AV	662063G	1		1														2000	4
036B - 5.35	37	6	19TH ST & CLEVELAND AV	662064N	1		1					2	1R								2000	4
036B - 5.41	37	6	20TH ST	662065V	1		1														2000	4
036B - 5.45	37	6	21ST ST & CLEVELAND AV		1		1														2000	4
036B - 5.50	37	6	22ND ST & CLEVELAND AV	662066C	1		1					1	1R								2000	4

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036B - 5.55-B	37	6	23RD ST		1		1															
036B - 5.58	37	6	23RD ST & CLEVELAND AV	662067J	1		1														2000	4
036B - 5.60-C	37	6	CLEVELAND AV	662068R	1					1		1	1R								1000	
036B - 5.65	37	6	CLEVELAND AV & 24TH ST	662069X	1		1					2	1								2000	4
036B - 5.66	37	6	24TH ST		1		1					3	8A							10/26/67	5000	4
036B - 5.66-B	37	6	24TH ST		1		1															
036B - 5.77	37	6	24TH ST		1		1															
036B - 5.88	37	6	23RD ST		1		1															
036B - 6.90	37	1	D ST	662070S	1		1					1	1R								2000	4
036B - 7.50	37	1	FREEWAY FRONTAGE RD		1		1					2	9							10/26/72	2500	4
036B - 7.52-B	37	1	F ST (I-5) UP	662072F	3		1															4
036B - 7.60	37	1	F ST	662073M	1		1					1	1R								1000	4
036B - 7.67	37	1	WOODLAWN AV		1		1					1	8A							09/08/77	1000	4
036C - 7.40	37	1	F ST		1		1					1	1R								500	2
036C - 8.47	37	1	J ST	661818V	1		1					2	9	1	9A					07/13/72		2
036D - 1.30	37	8	13TH ST	661822K	1		1		1	1		1	1R								5000	
036D - 1.40	37	8	14TH ST	661824Y	1		2		1			2	1R								5000	
036D - 1.50	37	8	16TH ST	661823S	1		2					1	1R								4000	
036D - 1.55	37	8	17TH ST	661825F	1		2					2	1R								4000	
036D - 1.57-A	37	8	COMMERCIAL (SR 5) OH	661826M	3		1															2
036D - 1.70	37	8	19TH ST	661827U	1		2					1	1R								2000	
036D - 1.75	37	8	20TH ST	661828B	1		2					2	1R								2000	
036D - 1.80	37	8	21ST ST	661829H	1		2					2	1R								2000	
036D - 1.85	37	8	22ND ST	661830C	1		2			1		1	1R								2000	
036D - 1.95	37	8	24TH ST	661881M	1																2000	

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036D - 2.00	37	8	HARRISON AV	661882U	1		2														2000	
036D - 2.10	37	8	CROSBY ST & 25TH ST	661883B	1		2					2	1R								6000	
036D - 2.15	37	8	OCEANVIEW BL	661884H	1		2														6000	
036D - 2.20	37	8	26TH ST	661885P	1		2					2	1R								6000	
036D - 2.30	37	8	27TH ST	661886W	1		2					1	1R								1000	
036D - 2.35	37	8	EVANS ST	661887D	1		2					1	1R								1000	
036D - 2.40	37	8	HENSLEY ST	661889S	1		2														1000	
036D - 2.45	37	8	28TH ST	661890L	1		2					1	1R								5000	
036D - 2.50-C	37	8	COMMERCIAL ST	661891T	1					1		1	1R								500	
036D - 2.55	37	8	29TH ST	661892A	1		2														2000	
036D - 2.70	37	8	30TH ST	661893G	1		2					2	1R								10000	
036D - 2.80	37	8	31ST ST	661894N	1		2			1		2	1R								2000	
036D - 2.82-C	37	8	COMMERCIAL ST		1					1		1	1R								1000	
036D - 2.88-C	37	8	COMMERCIAL ST		1					1		1	1R								1000	
036D - 2.95	37	8	32ND ST	661895V	1		2			1		2	1R								5000	
036D - 3.10-B	37	8	IMPERIAL AV UP	661896C	1		1															2
036D - 3.20-D	37	8	K ST PED XING	661897J	1		1					2	1								7500	2
036D - 3.50-A	37	8	IMPERIAL (SR 15) OH	661898R	3		1															2
036D - 3.60	37	8	FRANCIS ST	661899X	1		2					1	8A	2	9					10/01/86	10000	
036D - 3.60-BD	37	8	K ST		1		1															
036D - 3.90	37	8	HORTON AV	661900P	1		2					2	9							10/01/86	500	
036D - 4.60	37	8	43RD ST	661901W	1		2					2	9							10/01/86	1000	
036D - 5.00-B	37	8	GREENWOOD UP		3		1													09/10/75		
036D - 5.10-B	37	8	I 805 UP		1		1															

SAN DIEGO COUNTY

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	TRACKS B	TRACKS P	TRACKS SI	TRACKS SP	TRACKS Y	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	Date	HWY DAILY VOLUME HWY	HWY DAILY VOLUME RR
036D - 5.20-B	37	8	47TH ST UP	661902D	1		1															2
036D - 5.21-B	37	8	TEMP BRIDGE		1		1															
036D - 5.70	37	8	EUCLID AV	661903K	1		2					1	8	2	9					10/01/86	17000	
036D - 6.00-D	37	8	54TH ST	661904S	1		1					2	10								2000	2
036D - 6.50	37	8	MERLIN DR	661905Y	1		1					2	9								4000	2
036D - 6.70	37	8	60TH ST	661906F	1		1					2	9								2000	2
036D - 6.90	37	8	62ND ST	661907M	1		1					2	9								2000	2
036D - 7.00-D	37	8	63RD ST PED XING	662015S	1		1														100	2
036D - 7.20	37	8	65TH ST	661908U	1		1					2	9								2000	2
036D - 7.40-D	37	8	66TH ST PED XING	661909B	1		1					2	10								100	2
036D - 7.60-D	37	8	68TH ST PED XING	661910V	1		1					2	10								100	2
036D - 7.75	37	8	69TH ST	661911C	1		1					2	9								2000	2
036D - 8.90	37		MASSACHUSETTS AV	661912J	5		1					1	9	1	9A						12400	2
036D - 9.61	37		SAN MIGUEL AV	661914X	5		1					1	9	1	9A						6000	2
036D - 9.90	37		CENTRAL AV	661915E	5		1					2	9								1400	2
036D - 10.15-D	37		PEDESTRIAN XING	661917T	5		1														100	2
036D - 10.20	37		BROADWAY	661919G	5		1					1	8	2	9	1	9A			08/21/74	20100	2
036D - 10.30	37		LEMON GROVE AV	661918A	5		1		2			3	9	1	9A					01/12/76	9300	2
036D - 10.70-B	37		GROVE (SR 94) UP	661920B	3		1															2
036D - 10.80	37		GROVE PL - HIGH ST	661921H	5		1					2	9								1000	2
036D - 12.20	37	5	LEMON AV	661923W	1		1					2	8	2	9A						3000	2
036D - 12.30	37	5	LA MESA BL	661924D	1		1					1	8	2	9	1	9A			09/16/63	12000	2
036D - 12.40	37	5	ALLISON AV	661925K	1		1					2	9	1	9A					12/11/73	2000	2
036D - 12.50	37	5	UNIVERSITY AV	661926S	1		1					3	9	1	9A					12/11/73	6000	2

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	TRACKS B	TRACKS P	TRACKS SI	TRACKS SP	TRACKS Y	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	Date	HWY DAILY VOLUME HWY	HWY DAILY VOLUME RR
036D - 12.64-C	37	5	SPRING ST	661927Y	1					1		2	8A							01/18/67	10000	2
036D - 12.70-B	37	5	SPRING ST (SR 8) UP	661928F	3		1													12/21/66	6000	2
036D - 12.71	37	5	SPRING ST	661929M	1		1					1	8	2	9					12/21/66	3000	2
036D - 12.72-A	37	5	EL CAJON BL	661930G	3		1															
036D - 12.88-B	37	5	I-8 UP	661931N	3		1															
036D - 13.40-B	37	5	JACKSON DR	661991X	1		1															
036D - 13.60-C	37	5	ALVARADO AV	661993L	1					1		2	1R								500	2
036D - 13.70-C	37	5	ALVARADO AV	661994T	1					1		2	1R								500	2
036D - 13.90-A	37	5	NAGEL ST	661995A	1		1															2
036D - 14.70	37	5	SEVERIN DR	661996G	1		1					2	9A							04/13/84	2000	2
036D - 15.30-A	37	5	MURRAY AV	661997N	1		1															2
036D - 15.40-AD	37	5	MURRAY AV PED	661998V	1		1															2
036D - 15.60-A	37	3	EL CAJON BL OH		3		1															
036D - 16.00-A	37	3	EL CAJON (SR 8) OH	662001J	3		1															2
036D - 16.10	37	3	HILL	662002R	1		1					2	9								1000	2
036D - 16.70	37	3	PALM AV	662003X	1		1			1		2	9								1000	2
036D - 16.90-B	37	3	MAIN ST	662004E	1		1														8000	2
036D - 17.29-A	37	3	MARSHALL (SR 8) AV	662008G	3					1											8000	2
036D - 17.45	37	3	WAGNER ST		1							2	9									
036D - 17.56	37	3	ARNELE STA. ENTRANCE		1							2	9									
036D - 17.70	37	3	PETREE ST		1							3	9									
036D - 17.70-C	37	3	PETREE ST		1					1		2	8A	3	9					12/05/80		
036D - 17.81-B	37		FLETCHER PKWY UP		1																	
036D - 17.81-C	37	3	FLETCHER PKWY	662011P	1					1		2	8	4	8A					05/20/61	25000	2

Crossing No.	Cnty	City	Local Name	DOT No.	Jur	TRACKS M	TRACKS B	TRACKS P	TRACKS SI	TRACKS SP	TRACKS Y	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION No.	PROTECTION Type	PROTECTION Date	HWY DAILY VOLUME HWY	HWY DAILY VOLUME RR
036D - 17.91-B	37		FESLER ST UP		1																	
036D - 17.91-C	37	3	FESLER ST	662013D	1					1		2	8								1000	2
036D - 18.14	37	3	VERNON WY	662014K	1							2	9									
036D - 18.47	37	3	BRADLEY AV		1							6	9									
036D - 18.52	37	3	CHEM-TRONICS PED XING		1							2	10									
036D - 18.53	37	3	CHEM-TRONICS PED XING		1							2	10									
036D - 18.55	37	3	CHEM-TRONICS DWY		1							2	9									
036D - 18.79	37	3	BILLY MITCHELL DR		1							2	9A									
036D - 19.63	37	3	CUYAMACA ST		1							1	9A									
036D - 19.73	37		PROSPECT AV		1																	
036D - 19.98	37		BUENA VISTA ST		1																	
036D - 20.23	37		MISSION GEORGE RD		1																	

Appendix S
Additional Bat Surveys

SUMMER BASELINE SURVEYS FOR BATS OF THE EAGLE MOUNTAIN PROJECT SITE RIVERSIDE COUNTY, CALIFORNIA

Prepared by

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For

CH2M Hill
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August 26, 1996

INTRODUCTION

Previous field surveys in May and December 1990, June and December 1991, June and December 1992, January and June 1993, and January 1996 documented the number of California leaf-nosed bats (*Macrotus californicus*) roosting in the Kaiser Eagle Mountain Mine in Riverside County, California, part of which is located in Sections 32 through 34 of Township 3 South, Range 14 East and Sections 1 and 2 of Township 4 South, Range 14 East in the unincorporated area of the County of Riverside, State of California. *Macrotus* was discovered roosting in the main Kaiser Eagle Mountain Mine adit as well as one of the cement buildings on the mill site. *Macrotus* is a California Department of Fish and Game (CDFG) Species of Special Concern and a United States Fish and Wildlife Service (USFWS) former Category 2 Candidate Species for Threatened or Endangered Status. The discovery of the leaf-nosed bat roost in the Kaiser mine represented the first record of this species from the Eagle Mountains. The December 1990 survey of all locatable mines in the Eagle and Coxcomb Mountains verified that the Kaiser adit was the only known winter roost of *Macrotus* in the area. This species is the northernmost representative of the tropical family Phyllostomatidae. Unlike temperate zone bats, they cannot lower their body temperature and enter daily or seasonal torpor (hibernation). They survive in the California desert in the winter by selecting warm mines (greater than 80 F) as roost sites. During the summer, leaf-nosed bats can find warm temperatures near the entrances of many mines, so more roost sites are available to them then. The purpose of the current surveys is to obtain baseline population data during various seasons over several years before any landfill development occurs.

METHODS

Survey dates for this report are June 27-29, 1996. On the first evening, bats were counted using night vision equipment as they exited the main Kaiser adit. About 90 minutes after dark (when exiting bats were not seen), the mine was entered and the areas where the bats were roosting were examined and readings of temperature and humidity taken. The sheets of old computer paper that had been placed under the areas where the bats roosted were checked in order to determine present roosting patterns. The evening of June 28, mist nets were placed over the mine entrances to capture bats as they emerged at dusk. The captured *Macrotus* were banded for subsequent individual identification since recapture data can provide information on longevity, movements and roost fidelity. The Black Eagle Mine, (where isolated bats had been observed on previous visits) was not watched, but an Anabat 2 ultrasonic detector, delay switch and tape recorder were placed on the edge of the shaft to record passing bats throughout the night on June 27. During the day on June 28, the cylindrical cement building on the old mill site and the U-shaped tunnel at the scales were checked for roosting bats.

RESULTS

The 24 *Macrotus* observed exiting from the Kaiser adit on the evening of June 27, 1996 represents an increase from the 10 bats that were present during the last summer count on June 24, 1993, but less than the approximately 60 bats

noted during the first warm season survey on May 26, 1990. When the mine was entered after the exit count, 3 more bats were seen in the mine. Mist nets spread across the entrances on June 28 at dusk captured 6 male and one lactating female *Macrotus* as they were exiting the mine. The bats were fitted with numbered metal bands and released. Only 6 bat echolocation signals were recorded from the Anabat detector placed overnight by the Black Eagle shaft, and it was not possible to tell if these bats were exiting or entering the shaft. No bats were found in the cylindrical building on the old mill site. However, 5 *Macrotus* were discovered in the U-shaped building. A previously banded male and a pregnant female were captured in hand nets, while one of the other bats was observed with an attached infant. This cluster probably represents a small "harem" as has been studied in other *Macrotus* sites.

DISCUSSION

In prior summer surveys, the *Macrotus* captured exiting from the Kaiser adit were males. The presence of a lactating female this year indicates at least a small maternity cluster. The number of bats has doubled since the last summer census in 1993. In May 1990, a small maternity colony was identified in the cylindrical building. The following year, 2 dead *Macrotus* were discovered there and by summer 1992, no more bats were seen. No bats (but some fresh guano) were found during a check of the building during this visit . Although no bats are now roosting in that building, the discovery of a small maternity colony in the U-shaped tunnel is encouraging.

RECOMMENDATIONS

Restrict access to the Kaiser adit: Since the Kaiser adit is the main winter roost for *Macrotus* in the Eagle Mountains, and is now possibly a summer maternity site, it is desirable that this roost not be impacted as the proposed project proceeds. To determine the impact of the project and the effectiveness of mitigation procedures, long-term monitoring at different seasons should be continued. To that end, it is important that baseline values of population size during winter and summer be established based on monitoring over several years prior to the start of the project in order to document normal population fluctuations. To establish as accurate baseline, human disturbance to the roosts should be greatly reduced. Even with the locked gates, foot and vehicular traffic still occurs. Since the entrances of the Kaiser adit are being used for storage, an approved bat gate should be installed beyond the storage area at each side of the U to reduce the chance of human disturbance of the bats. If entry into the area is necessary by MRC or Kaiser personnel, then the time of day and date of visit could be recorded. The areas used by roosting bats on the second level and left branch of the main level should be avoided.

Monitor the maternity colony in the U-shaped tunnel: This small colony will undoubtedly be impacted sooner that the Kaiser adit as the project proceeds. The bats will need to be evicted at some point. Exclusion should not be done during the maternity season (May-August).

Reopen and gate the adit into the Black Eagle: The bats might colonize this site as activity in the U-shaped tunnel and the Kaiser adit increases. The mine would need to be monitored seasonally as to the success of the gate.

Appendix T
Kaiser/MRC Agreement with National Park Service

AGREEMENT BETWEEN THE NATIONAL PARK SERVICE
AND
MINE RECLAMATION CORPORATION, EAGLE MOUNTAIN RECLAMATION, INC., KAISER EAGLE MOUNTAIN, INC.

THIS AGREEMENT ("Agreement") is made and entered into this 9th day of December, 1996 by and between National Park Service("NPS") and Mine Reclamation Corporation, Eagle Mountain Reclamation, Inc., and Kaiser Eagle Mountain, Inc., (collectively "Kaiser/MRC"), and their successors and assigns, collectively referred to as the "Parties."

Whereas, Kaiser/MRC is proposing to develop and operate a municipal solid waste landfill ("Project") located at the former Kaiser Steel Corporation iron ore mine at Eagle Mountain in eastern Riverside County, California which is located approximately 1.5 miles from Joshua Tree National Park ("Park"), which surrounds the Project on three sides; and

Whereas, in 1994 when Congress considered and then passed the California Desert Protection Act ("CDPA"), 16 U.S.C. §410aaa, et seq., and designated the Park as a National Park, the House Committee on Natural Resources noted as a part of the legislative history that:

> "The Committee recognizes that there is a proposed Eagle Mountain solid waste disposal facility which, if developed, would be located at the site of the defunct Kaiser iron ore mine within approximately 1.5 miles of the Joshua Tree National Park. It is not the intent of the Committee that this legislation have any effect on the future development of this disposal facility at that location, and does not expect that such development will be affected by the site's proximity to the Park or wilderness within the Park. The Committee notes that any such development will first have to meet the requirements of various federal, state and local laws and regulations in order to be licensed; the Committee does not intend that this legislation be construed so as to impose additional regulation, based on the mere fact that the Eagle Mountain site is in close proximity to the Park or wilderness within the Park should this facility be located at that site."

Whereas, the Park is set aside by Congress to protect, in perpetuity, the natural and cultural resources located therein, as well as the ecological processes that make the area unique and worthy of National Park status; and NPS is responsible for managing and protecting the Park under these congressional mandates; and

Whereas, Kaiser/MRC has proposed to the Bureau of Land Management ("BLM") of the Department of the Interior the exchange of lands and interests which may be involved in the Project; and the BLM is the Federal lead agency for purposes of compliance under the National Environmental Policy Act (NEPA), 42 U.S.C. §4321, et seq., and for the preparation of a joint Environmental Impact Statement and Environmental Impact Report ("EIS/R") for the Project; and

Whereas, the authority for permitting the design, construction, and operation of the Project rests with the various state and local agencies and jurisdictions within the State of California; and

Whereas, in order for the Project to proceed Federal law requires, and the EIS/R must conclude, that the Project will meet or exceed the requirements of regulations adopted pursuant to Subtitle D of the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. §6901, et seq., ("RCRA").

In addition, for the Project to proceed, state law requires and the EIS/R must conclude that the Project will meet or exceed all requirements of state and local laws and regulations dealing with the construction of the Project; and

Whereas, the Parties agree, based on known and available information, and taking into account the comments of the NPS and the responses provided, that the EIS/R is a complete analysis of the known effects of the Project upon the environment, that the EIS/R meets the requirements of the California Environmental Quality Act ("CEQA"), NEPA, and the relevant regulations of the Department of Interior and that the mitigation measures proposed, if implemented, reduce the known effects of the Project on the Park (except for the potential effects on the wilderness experience) below the levels of significance as required by CEQA; and

Whereas, NPS believes that the Project's location in proximity to the Park may cause unknown or unpredictable impacts or intrusions to the Park's natural resources including, ecosystem function, air quality, wilderness, ground water, and biodiversity; that potential and unknown impacts from the Project are difficult to predict or quantify; and that installation and operation of the proposed landfill Project could cause adverse changes in the ecosystem; and

Whereas, NPS believes that the Project, if approved, will place an additional funding burden on NPS to develop new scientific information, to undertake research strategies, and to implement additional resource management efforts to monitor and address possible impacts from the Project into the Park's natural systems; and

Whereas, the purposes of this Agreement are to provide a process to reduce the risk to the Park of unforeseen effects which may occur if the Project should become operational, to provide NPS with enforcement tools to protect Park resources, and to assure that funds will be available to provide adequate science, research, and resource management to monitor as well as address possible impacts of the Project on the Park's natural systems; and

Whereas, Kaiser/MRC will participate in the establishment and funding of the Eagle Mountain Environmental Mitigation Trust ("Trust") (attached in draft form as Exhibit A) as required by the Biological Opinion issued by the U.S. Fish & Wildlife Service ("Service"), dated September 10, 1992 and reconfirmed September 20, 1993, in connection with the Project; and the purpose of the Trust is to preserve and enhance biological, scenic, and cultural resources in Riverside County, particularly in the desert regions of the County, and other areas, including the Park, which are in proximity to the Project; and

Whereas, the Trust, to be administered by the County, further provides for the acquisition, restoration, maintenance, and preservation of open space lands, or interests in lands, water rights, and/or habitat on such lands, including lands in private ownership within and adjacent to the Park; and is also intended to fund the establishment of public facilities on such lands and to fund research, education, monitoring, and mitigation of the potential long-term effects of the Project; and

Whereas, Kaiser/MRC will provide money from tipping fees to fund the Trust, which at full operation of the Project (20,000 tons/day) is estimated to be in excess of $6,000,000 per year, will assure the establishment of the Trust, and will assure that the Trust will provide certain funds, as set forth in this Agreement, for the use and benefit of the National Park Foundation ("Foundation"), a Congressionally chartered private corporation, 16 U.S.C. §19e, to enhance the development of information, data and science on the possible impacts of the Project on the Park; and

Whereas, NPS by this Agreement does not withdraw its objections to the Project based upon proximity to the Park, but rather seeks to further protect and preserve the resources of the Park in the event that the Project is authorized to proceed.

Now, therefore, in consideration of the various promises made herein, and as further consideration of the exchange of land and interest in lands between Kaiser/MRC and BLM; and pursuant to the authorities vested in the NPS under its organic act, 16 U.S.C. §1, et seq., as amended and supplemented, and the legislation establishing the Park, 16 U.S.C. §410aaa-7, the Parties agree as follows:

SECTION 1 - PURPOSES

1.1. This Agreement is intended to assure NPS that the Project shall be constructed, operated and managed in consideration of protecting the purposes and values of the Park, and that the Project shall not result in derogation of the values and purposes for which the Park was established by Congress.

1.2. This Agreement is intended to assure Kaiser/MRC that NPS does not have a regulatory role with respect to the operation and management of the Project, and that Kaiser/MRC will fulfill and undertake the contractual obligations set forth herein. Provided, however, nothing in the Agreement shall preclude NPS from commenting, consistent with this Agreement, on any permit or proposed action by Kaiser/MRC regarding the Project.

1.3. This Agreement is not intended to supersede or circumvent the EIS/R, but rather to set forth and to define additional contractual obligations and responsibilities of Kaiser/MRC.

SECTION 2 - TERM

2.1. The Parties understand and agree that until and unless i) the BLM authorizes the pending land exchange between BLM and Kaiser/MRC and title to the selected lands are vested in Kaiser/MRC; and, ii) the County of Riverside authorizes the use of the land as a landfill; and, iii) Kaiser/MRC has acquired all necessary permits and authorizations required by all applicable local, state and federal laws to operate a municipal solid waste landfill at the Project site; and, iv) Kaiser/MRC actually commences operation of the Project as a municipal solid waste landfill, the provisions of this agreement are not required to provide the mutual protections and procedures set forth herein.

2.2. Notwithstanding the foregoing, this Agreement shall become effective immediately in order that its provisions and the additional mitigation and protective measures agreed to herein may be included in the final EIS/R and may be considered by local, state and federal decision makers and, if appropriate, its provisions included in terms and conditions which may be imposed by such decision makers. This Agreement shall continue for the "life of the landfill" plus 100 years, where "life of the landfill" is 117 years.

2.3. In the event, i) BLM has not authorized the pending land exchange and title to the selected lands has not vested in Kaiser/MRC; and, ii) the County of Riverside has not authorized the use of the land as a landfill; and iii) Kaiser/MRC has not acquired all necessary permits and authorizations required by all applicable local, state and federal laws to operate a municipal solid waste landfill at the Project site; and iv) Kaiser/MRC has not actually commenced operation of the Project as a municipal solid landfill within ten (10) years from the date hereof, either Party may terminate this Agreement.

SECTION 3 - OBLIGATIONS OF KAISER/MRC

3.1. Kaiser/MRC shall comply with each term, condition and mitigation measure imposed by each regulatory agency having jurisdiction over the Project and with each term, condition, and mitigation measure imposed by BLM, if BLM approves the land exchange. In addition, Kaiser/MRC shall comply with the following additional terms, conditions, and mitigation measures agreed to with NPS:

3.2. ODOR CONTROL - Kaiser/MRC shall undertake the following obligations in connection with odor control:

3.2.1. Operate the Project in such a manner as to minimize landfill and arriving waste odors to the extent that Park visitors and employees within the Park will not be subjected to noticeable levels.

3.2.2. Kaiser/MRC will minimize the number of municipal waste containers waiting in staging areas, and monitor and control animal access to containers onsite waiting to be placed in the landfill.

3.3. AIR QUALITY - Kaiser/MRC shall undertake the following obligations in connection with air quality:

3.3.1. Kaiser/MRC will request of South Coast Air Quality Management District ("SCAQMD") that air offset credits be provided from SCAQMD's priority reserve for each gas flare station prior to its construction.

3.3.2. In view of the concerns of NPS regarding the Project's potential effects on air quality, Kaiser/MRC agrees to reduce the Project's onsite vehicle NO_x emissions from the 551 tons per year (TPY) reported in the EIS/R to 226 TPY, a reduction of 325 TPY. This emission reduction should result in a reduction in the potential for visible plume impacts to the Park.

3.3.3. Purchase, install, maintain, and replace, as necessary, in a manner mutually acceptable to Kaiser/MRC and NPS, a visibility monitoring station within the Park to assess the impacts of the Project on visibility at the Park using an 'IMPROVE' visibility monitoring station or other instruments mutually acceptable to the Parties. NPS is responsible for the station's operation and data collection. The station shall be installed 6 months prior to commencement of operation of the Project.

3.3.4. Purchase, install, maintain, and replace, as necessary, in a manner mutually acceptable to Kaiser/MRC, NPS, and SCAQMD, two air pollutant monitoring stations, equivalent to the station in the Park at the Black Rock Canyon Campground, for ozone, NO_2, and PM-10. NPS is responsible for operation and data collection, if the stations are within the Park. The stations shall be installed 6 months prior to commencement of operation of the Project. Kaiser/MRC is responsible for operation and data collection if the stations are outside the Park.

3.3.5. Purchase, install, maintain, and replace, as necessary, in a manner mutually acceptable to Kaiser/MRC and NPS, a Project site weather station similar to the NPS station located in Pinto Basin to collect wind speed, direction, temperature, and relative humidity, with the addition of Delta T stability measurements, in a 10 meter tower. The station shall be installed six months prior to commencement of operation of the Project. Kaiser/MRC is responsible for the operation and data collection.

3.3.6. The visibility monitoring station specified in paragraph 3.3.3 shall be located in an area, mutually acceptable to Kaiser/MRC and NPS,

close to the location where modeled visibility impacts are projected to be highest (i.e., near sight paths 2 and 3 identified in the EIS/R). One of the air pollutant monitoring stations specified in paragraph 3.3.4 shall be placed at the same location as the visibility monitoring station. Kaiser/MRC and NPS shall jointly develop a protocol for determining the baseline visibility levels at that monitoring station location prior to the commencement of activities at the Project, and for determining whether the Project is resulting in a significant visibility impact. If, based on this protocol and data monitored at this site during operations, it is determined that the Project is causing a significant visibility impact, Kaiser/MRC shall implement additional mitigation measures, determined necessary by modeling analysis consistent with the U.S. Environmental Protection Agency guidelines sufficient to mitigate the visibility impact.

3.4. NIGHTSKY PROTECTION - Kaiser/MRC shall undertake the following obligations in connection with Nightsky Protection:

3.4.1. Shield all lights within the Project area to protect the nightsky from light pollution, use low pressure sodium lights, or their functional equivalent, wherever color recognition for safety is not of concern, and use mercury vapor lights in working areas where color recognition is important. All existing lights in the Project area will be retrofitted with low pressure sodium lights.

3.5. - WINDBLOWN DEBRIS - Kaiser/MRC shall undertake the following obligation in connection with windblown debris:

3.5.1. There will be no windblown litter from the Project detectable in the Park.

3.6. DESERT TORTOISE - Kaiser/MRC shall undertake the following obligations in connection with the Desert Tortoise:

3.6.1. Conduct and continue the existing raven monitoring program from at least twelve (12) months prior to commencement of operation for a period of at least 10 years.

3.6.2. Conduct, beginning at least twelve (12) months prior to commencement of operation of the Project and continuing for a period of at least 10 years, a predator monitoring program at the Project.

3.6.3. Mitigate potential increases in raven, coyote, kit fox, and other predator populations caused by the presence of trash at the Project. If the Common Raven population in the region of the Project increases as a result of landfill activities, then an active control program will be instituted. Kaiser/MRC will present its control plan and depredation permits to NPS prior to start up of the landfill. If control measures are instituted, but found to be ineffective, Kaiser/MRC will revise its control plan and implement a new plan.

3.6.4. Fence the perimeters of all active landfilling and waste handling areas with fencing designed to exclude large scavengers and place a minimum of 6 inches of appropriate cover material over deposited and compacted refuse on a daily basis to minimize raven, rodent, and other opportunistic scavenging.

3.6.5. Conduct, upon commencement of landfill operations, a non-lethal predator control program, that will, as a minimum include hazing at the landfill site, coyote and kit fox aversion (aversive conditioning) techniques, prompt removal of road-killed wildlife along access roads, and the possible use of bird repellent methyl anthranilate.

3.7. NELSON'S BIGHORN SHEEP - Kaiser/MRC shall undertake the following obligation in connection with Nelson's Bighorn Sheep if the BLM approves the land exchange:

3.7.1. Pay for the acquisition and installation of new water sources in locations outside the Park to replace impacted water sources within the Project area that bighorn sheep now use. Kaiser/MRC will not place such water sources in locations that tend to attract sheep away from water sources in the Park. The location of the sources shall be determined in consultation between Kaiser/MRC, NPS, BLM, and California Department of Fish and Game.

3.8. LAND PROTECTION - Kaiser/MRC shall undertake the following obligations in connection with land protection and acquisition:

3.8.1. Kaiser/MRC, concurrent with the completion of the land exchange, shall irrevocably offer to convey all of the fee lands owned by Kaiser/MRC located within the Park consisting of approximately 190 acres and convey such lands and mining claims to NPS at no cost. NPS shall have until January 1, 2020, to accept all or part of the 190 acres.

3.8.2. Provide funds to the Foundation through the Trust. Title to lands acquired from Kaiser/MRC within the Park will be conveyed to the United States at no cost.

3.8.3. Kaiser/MRC shall execute and, at no cost to the United States, simultaneously with execution of any documents associated with the BLM exchange of land or interests in land, should the proposed Eagle Mountain exchange occur, a covenant running with the land in the form of Exhibit B to this Agreement; and shall be responsible for the subsequent recordation of the covenant; and waives all rights and benefits that might be available under the Uniform Relocation Assistance Act, 42 U.S.C. § 4601, et seq., for these conveyances identified in paragraph 3.8.

3.9. WATER RESOURCES - Kaiser/MRC shall undertake the following obligation in connection with water resources:

3.9.1. Prepare a plan for monitoring the effects of ground water withdrawal in the Chuckwalla Basin associated with the Project on the groundwater resources of the Pinto Basin within the Park and fund the establishment and operation of long-term ground water monitoring sites. The plan will be subject to joint review and approval by Kaiser/MRC and NPS prior to implementation. Kaiser/MRC will provide NPS with all monitoring data. If the data demonstrate that significant impacts to NPS water sources in the Pinto Basin are likely to occur due to groundwater withdrawals in the Chuckwalla Basin, Kaiser/MRC and NPS will enter into formal discussions to determine the cause(s) of these potential impacts. If it is determined that these impacts are attributable to the operation of Kaiser/MRC wells, Kaiser/MRC, in cooperation with NPS, will modify its groundwater pumping regime to eliminate these significant impacts. Kaiser/MRC shall not be responsible for any cumulative impacts to NPS water resources in the Pinto Basin attributable to groundwater withdrawals by other water users within the Chuckwalla Valley. Any modification of the Kaiser/MRC pumping regime, as required herein, shall be proportionate to the effects of its withdrawals from the Chuckwalla basin upon NPS water sources within the Pinto Basin when compared to the effects of all withdrawals from the Chuckwalla Basin upon NPS water sources within the Pinto Basin. Kaiser/MRC agrees not to use water from the Pinto Wells for any purposes related to this Project.

3.10. NOISE - Kaiser/MRC shall undertake the following obligation in connection with noise:

3.10.1. Kaiser/MRC will provide for the establishment and operation of an ambient noise monitoring program subject to review and approval of NPS. Kaiser/MRC will also adopt new technology whenever feasible to reduce noise from project operations to the maximum extent practicable.

3.11 RESEARCH - Kaiser/MRC shall undertake the following obligation in connection with long-term research, monitoring, public education and increased NPS resource management capabilities:

3.11.1. Prior to the commencement of operation of the Project the Trust will be established and will be legally obligated to pay without restrictions on use to the Foundation, ten percent (10%) of the funds collected by the Trust on an annual basis to be utilized by the Foundation for land acquisition, long-term research, monitoring, and increased NPS resource management capabilities, as the Foundation shall determine, in concurrence with NPS, to be in the best interests of the Park. The Foundation shall account to the Trustees of the Trust on an annual basis and set forth the intended use of the funds for the ensuing year.

3.11.2. Kaiser/MRC shall provide to the Foundation, (1) an advance of $75,000 per year for a period of two years, beginning upon completion of the land exchange with BLM, to be repaid without interest by the Foundation under sec. 3.11.1 of this Agreement from the first Trust proceeds received by it; and, (2) provide a one-time grant in the amount of $100,000 to the Foundation payable immediately upon commencement of Project operations.

3.11.3. Provide NPS with 800 square feet of office space and 1,500 square feet of living space at the Kaiser Eagle Mountain Townsite and/or at the Project upon completion of the land exchange, for the entire term of this Agreement.

3.12. FINANCIAL ASSURANCES - Kaiser/MRC shall undertake the following obligation in connection with financial assurances:

3.12.1. Cause NPS to be listed as an additional insured on its Pollution Legal Liability Insurance Policy ("Policy") and by this reference made a part hereof. The Policy will cover bodily injury, injury to plant and animal species or damage from air, water or waste that migrates from the Project. The Policy will be in the amount of $10 million at start of construction and $20 million at start of operations. Funds benefitting NPS as a result of claims made by NPS shall be expended as directed by NPS, including but not limited to payment to the Foundation.

3.12.2. Kaiser/MRC shall have the absolute right, at any time and from time to time, to substitute other or additional financial assurances ("Substituted Assurances") for the Policy, which Substituted Assurances may be in the form of another insurance policy, corporate guarantees, letters of credit, other generally accepted forms of financial assurances, or a combination thereof, provided that the protection afforded to NPS pursuant to the Substituted Assurances shall be substantially equivalent, both in terms of amount and likelihood of collection, to the protection afforded under the Policy. Kaiser/MRC shall inform NPS of its intention to substitute assurances at least 60 days prior to the proposed substitution and shall describe such assurances with sufficient detail and certainty to allow NPS to make a reasoned decision regarding the sufficiency of the Substituted Assurances. In the event NPS determines that the proposed Substituted Assurances do not provide substantially equivalent protection, the provisions and procedures set forth in Section 5 shall apply; provided that the panel required in Section 5.2.1 shall be comprised of independent risk management and insurance experts.

SECTION 4. OBLIGATIONS OF NPS

4.1 Facilitate and cooperate in the funded research and monitoring programs.

4.2 Provide Kaiser/MRC with copies of all draft and final monitoring and research data or studies which involve, affect or pertain to the Project, within ninety (90) days after receipt or completion of such data or studies.

4.3 Participate in development of proposed research and monitoring programs; provide research and special use permits as appropriate under 36 C.F.R. Chapter I.

4.4 Coordinate and manage NPS research and monitoring effort in order to understand and monitor the ecological changes that may accompany the Project.

4.5 Coordinate and participate in annual reviews and presentations of research and monitoring results by all Parties. Reviews of new monitoring and landfill operating technology developments will be jointly discussed and considered.

4.6 Cooperate with Kaiser/MRC and support applications by Kaiser/MRC for predator depredation permits at the Project from the proper authorities.

SECTION 5. MUTUAL COOPERATION

5.1 The Parties shall meet a least semiannually to review and discuss matters of concern and monitoring data and data trends for the purpose of avoiding conflicts.

5.2. In the event NPS identifies significant adverse impacts to the desert ecosystem which it believes are caused by the Project, which beliefs are supported by credible evidence, the following actions will be taken to verify the existence of such adverse impacts and to propose actions to reduce or eliminate those impacts.

5.2.1 NPS shall notify Kaiser/MRC of the alleged adverse impacts, the specific activity believed to cause such impacts, the data or other information upon which it relies and how NPS believes such impacts could be reduced or eliminated. Thereafter, the Parties shall promptly meet and confer regarding the allegations. In the event the Parties are unable to resolve their dispute within 60 days, the Parties shall convene a panel of independent scientists to be jointly selected and funded by Kaiser/MRC and NPS to determine the validity and/or accuracy of the allegations of NPS.

5.2.2 If the allegations of NPS are confirmed by the panel, Kaiser/MRC and NPS shall expeditiously attempt to reach agreement as to the steps which will be undertaken to reduce or eliminate the adverse impact. In the event the Parties are unable to reach agreement with respect to what remedial steps should be taken, within 90 days thereafter, any Party may commence the mediation process set forth in section 5.3 hereof.

5.3 Any party desiring mediation shall commence the process by written certified mail, return receipt requested. The Parties shall attempt to agree upon a single mediator. In the event they cannot agree within 30 days after receipt of the certified notice, Kaiser/MRC shall designate one mediator and the NPS shall designate another. Mediation efforts shall conclude within 90 days of the certified notice, unless the parties otherwise agree in writing. If mediation has failed to resolve the dispute, then the procedures of paragraphs 5.3.1 - 5.3.3 shall be followed.

5.3.1 In the event a violation of one of the covenants set forth in Exhibit B is alleged, the aggrieved Party may apply to a court of competent

jurisdiction for relief.

5.3.2 In the event a breach of any term of this Agreement is alleged, the aggrieved Party may apply to a court of competent jurisdiction for relief.

5.3.3 In the event an adverse impact upon the Park not involving the violation of the covenants nor the Agreement is alleged, prior to seeking judicial relief, NPS shall apply to the regulatory entity, if any, which may assert jurisdiction over such activity and shall otherwise exhaust its administrative remedies. Kaiser/MRC agrees that in those cases in which it has agreed to the solution which may not comply with existing permit conditions, it shall promptly apply for and support modifications to such permits. In no event shall Kaiser/MRC be required to violate the term of any permit or license nor to apply for any amendment to a permit or license unless it agrees to such amendment. Provided however, NPS may apply for permit modifications on its own motion, except as provided in 5.3.1 and 5.3.2.

5.4 No Party shall be entitled to seek judicial resolution of a dispute, except in circumstances where there are immediate and significant threats to Park resources, until the procedures set forth above have been exhausted.

SECTION 6. GENERAL PROVISIONS

6.1. This Agreement is the entire Agreement between the Parties. Nothing in this Agreement shall restrict either Party from taking any action, legal or otherwise, for any matter that is not part of the subject matter of this Agreement.

6.2 This Agreement can be amended, modified or terminated, only with the written consent of both Parties.

6.3 Any agreement for the payment or obligation of funds by NPS is subject to the availability of appropriated funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. §1341.

6.4 Nothing in this Agreement is intended to, nor shall it create rights in any third person or entity that is not a party to this Agreement.

6.5 In the event Kaiser/MRC voluntarily or involuntarily conveys the Project to any person, firm or entity, Kaiser/MRC shall inform its successor of the terms of this Agreement, and shall require its successor to acknowledge to NPS that the successor agrees to be bound by the terms hereof as a condition of such transfer.

6.6 Except has hereinabove provided, each Party shall have the full right to enforce each and every term of this Agreement and shall have full recourse to whatever remedies are available to it, at law or equity, to enforce the provisions hereof. The Parties further agree that monetary damages for a breach of the terms of this Agreement by a Party hereto may not be adequate and the obligation of a Party hereto may be enforced by specific performances.

6.7 The Parties agree that mutual cooperation is essential to implementing the actions necessary to achieve the commitments set forth in this Agreement. The Parties desire and agree to use their best efforts to work cooperatively, and shall endeavor at all times to maintain a spirit of cooperation and to settle disagreements through good faith negotiations between or among themselves.

7. SIGNATURES

Each undersigned representative of a Party certifies that he/she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind the Party to this Agreement. The BLM and Foundation by acknowledging this Agreement, accept and agree with the terms and conditions relating to their participation in the Agreement.

Mine Reclamation Corporation, by
Gary W. Johnson, Vice President

Gary W Johnson

Date 12/9/96

Eagle Mountain Reclamation, Inc., by
Richard E. Stoddard, President

Date 12/9/96

Kaiser Eagle Mountain, Inc., by
Richard E. Stoddard, vice president

Date 12/9/96

National Park Service, by
Denis P. Galvin, Acting Deputy Director

Date 12/09/96

Acknowledged by the Bureau of Land Management
Department of the Interior

Date

Acknowledged by the National Park Foundation

Date

Appendix U
Draft Environmental Trust

DECLARATION OF TRUST

THE EAGLE MOUNTAIN ENVIRONMENTAL MITIGATION TRUST

THIS TRUST shall be known and identified as THE EAGLE MOUNTAIN ENVIRONMENTAL MITIGATION TRUST ("Trust").

ARTICLE 1

Parties

The Board of Supervisors of the County of Riverside, California (the individual members of which are hereinafter referred to as "Co-Trustees", and the Board itself referred to as "Trustee"), declare that Mine Reclamation Corporation, a California Corporation (hereinafter referred to as "Trustor"), has transferred to the Trustee without consideration the property described in *Schedule A* attached to this instrument.

ARTICLE 2

General Purposes

This Trust is organized for the purpose of:

A. Preserving and enhancing biological, scenic and cultural resources in Riverside County, California, and particularly in the desert regions of eastern Riverside County, by (i) providing for the acquisition, restoration, maintenance and preservation of open space lands, or interests in lands, water or water rights and wildlife habitats thereon, (ii) providing public access facilities to and within such lands, (iii) supporting research and education concerning conservation of such natural resources, and, (iv) monitoring the long-term effects of the Eagle Mountain Landfill Project ("Landfill Project") upon the desert.

B. Providing a mechanism to fulfill (i) a condition of approval imposed by the Board of Supervisors of Riverside County, California, in connection with its approval of the Eagle Mountain Landfill Project, Specific Plan No. 252 to directly mitigate environmental effects of the Landfill Project upon the desert region of eastern Riverside County, and (ii) a mitigation measure imposed by the Bureau of Land Management and required by the United States Fish and Wildlife Service in connection with its consultation with the Bureau of Land Management pursuant to Section 7 of the Endangered Species Act (16 U.S.C.§1531, et seq.) regarding the effects of the Landfill Project upon the Desert tortoise, a Threatened Species, and the Desert pupfish, an Endangered Species. The condition of approval imposed by the Board of Supervisors and the mitigation measure imposed by the Bureau of Land Management require the operator of the Eagle Mountain Landfill Project to pay one dollar ($1.00), adjusted periodically as hereinafter provided,

per ton of non-hazardous municipal solid waste deposited at that facility and that the funds thus paid be utilized to fulfill the purposes set forth in Paragraph A of this Article 2.

ARTICLE 3

Trust Estate

A. The Trust Estate shall consist of any and all funds received by the Trustee from any source. All property now or hereafter subject to this Trust shall constitute the Trust Estate and shall be managed and distributed as hereinafter provided.

B. Trustor shall pay to Trustee a ($1.00) dollar per ton tipping fee ("Environmental Mitigation Trust Fee" or "EMT Fee")for all non-hazardous municipal solid waste deposited at the Eagle Mountain Landfill Project, which fee and the expenditure thereof as required by this Trust was imposed by the Riverside County Board of Supervisors as a mitigation measure and as condition of approval of the operation of such Project and as a mitigation measure required by the Bureau of Land Management, as described in Article 2 hereof.

(1) Commencing on January 1 of the tenth (10th) year after that year in which total municipal solid waste delivered to the landfill reaches the maximum annual amount of non-hazardous municipal solid waste permitted by the County of Riverside ("Base Year") to be delivered to the Project, and on January 1 of every tenth (10th) year thereafter ("Tenth Anniversary Year"), the EMT Fee shall be modified to an amount calculated as follows:

> The then current EMT Fee multiplied by a fraction, the numerator of which is the COLA Index amount on January 1 of the then current Tenth Anniversary Year and the denominator of which is the COLA Index amount on January 1, ten years prior thereto; provided however, that in no event shall the EMT Fee be less than one dollar ($1) per ton; and provided further that the increase for the next succeeding ten year period shall not exceed fifty percent (50%) of the EMT Fee in effect immediately prior to the increase as calculated pursuant to this paragraph.

(2) The COLA Index shall be the Consumer Price Index for all Urban Consumers in the Los Angeles-Anaheim-Riverside Areas (1982-1984 = 100), published by the United States Bureau of Labor Statistics. If the COLA Index specified herein is discontinued or revised during the term of the Trust, such other government index or computation with which it is replaced shall be used in order to obtain substantially the same result as would have been obtained if the COLA Index had not been discontinued.

C. Trustor or Trustee may also apply for and receive public and private grants, and receive gifts, donations and other financial support from public or private sources.

D. Funds from all sources shall be deposited by the Trustee in a Fund to be established and maintained as a segregated account by the Financial Officer of the Trust in accordance with paragraph E of Article 6 below.

ARTICLE 4

Powers of Trustee

In carrying out the general purposes of the Trust as described in Article 2 above, the Trustee shall have the following specific powers in addition to those powers now or hereafter conferred by law under California Probate Code Section 16200, et seq., incorporated herein by this reference, as amended or repealed and reenacted from time to time, and as supplemented or replaced by any successor statutes:

A. To purchase, receive by gift or bequest, sell, transfer, exchange, option, lease or enter into contractual arrangements, such as management agreements, with regard to open space lands and interests in such lands, including conservation easements and water rights, in order to preserve or restore such lands and interests in such lands and other natural and cultural resources of such lands.

B. To purchase, receive by gift or bequest, sell, transfer, exchange, lease, option, construct or repair improvements, other facilities, personal property and equipment, in order to restore, enhance, manage or protect wildlife habitats and other natural and cultural resources and provide public access to open space lands.

C. To conduct and direct studies, plans, research and educational programs regarding the preservation, management and restoration of wildlife habitats, ecosystems, and other natural and cultural resources.

D. To award grants or loans to private nonprofit environmental and land acquisition organizations, and to local, state and federal governmental agencies in furtherance of the powers described in Paragraphs A through C above.

E. To have and exercise all of the following powers in order to fulfill and enhance the specific powers listed in Paragraphs A through D above:

(1) To make and enter into contracts of all kinds, including appraisals, surveys, acquisition, management and operations agreements;

(2) To incur debts, liabilities and obligations, secured and unsecured;

(3) To employ agents, consultants, attorneys and employees;

(4) To be an applicant, make applications for, and receive grants from governmental and private entities;

(5) To initiate or defend, at the expense of the Trust, any litigation relating to the Trust or any property of the Trust Estate that the Trustee considers advisable, and to compromise or otherwise adjust any claims or litigation against or in favor of the Trust.

(6) To have and exercise any and all other powers not specifically mentioned above which may be necessary and proper to carry out the purposes of the Trust.

Notwithstanding any limitation on powers of a trustee or any fiduciary standard, procedure or other requirement imposed on a trustee by the California Probate Code or other applicable law, such limitation, standard, procedure or requirement shall be abrogated or modified to the extent allowable by law in order that the Trustee may, and only to the extent the Trustee is required by this Declaration of Trust to, carry out the purposes of the Trust.

ARTICLE 5

Trust Expenditures and Limitations

The Trustee shall have the power and the obligation to expend, on an annual or more frequent basis any or all of the income or principal of the Trust Estate, up to the whole thereof, as determined in the discretion of the Trustee (with the exception of payments to the National Parks Foundation, as hereinafter provided, for the benefit of Joshua Tree National Park ("Park"), which such payments shall be mandatory), but as otherwise limited or required in this Declaration of Trust. Any income not expended shall be accrued and added to principal.

A. **Payments to National Parks Foundation.** Ten Percent (10%) of the annual payments to the trust shall be paid by the Trustee to the National Parks Foundation ("Foundation") to be utilized by the Foundation for land acquisition, long-term research, monitoring of the effects of the Landfill Project upon the Park and to increase resource management capabilities of the National Park Service, as the Foundation shall determine to be in the best interests of the Park, in order to mitigate the effects of the Landfill Project on the Park. On an annual basis, and at such time as the Trustee shall determine, the Foundation shall inform the Trustee of the intended use of the payment for the ensuing year and shall provide an accounting of such funds for the previous year, which accounting shall set forth the actual use for which such funds were utilized.

B. Acquisitions. At least eighty percent (80%) of the remaining annual expenditures by the Trustee from the Trust Estate (after payment of the mandatory ten percent (10%) appropriation to the Foundation) shall be used for the acquisition, including the purchase, lease, exchange or other transfer, of interests in real property, water and water rights within those project locations designated in Paragraph D of this Article 5 below. Expenditures pursuant to this paragraph may be made for direct acquisitions by the Trust or in the form of grants to public or

private entities which are dedicated, authorized and empowered to conserve, protect, restore and enhance biological, scenic and cultural resources, to acquire specific real property, water or water rights. Applications for grants to acquire interests in real property, water and water rights shall include those protective measures the grant applicant will utilize to assure the long term use and management of the property to be acquired consistent with the purposes of this Trust.

C. **Other Expenditures.** The remaining twenty (20%) or less of total annual expenditures by the Trustee from the Trust Estate shall be used for all other expenses and costs of and for the Trust, including but not limited to administrative and operational costs of and for the Trust, or grants and awards to other entities related to the conduct or development of plans, studies, research, property management and education, including, but not limited to, the funding of a monitoring effort by the Bureau of Land Management, the Fish and Wildlife Service, each of which is an Agency of the Department of the Interior of the United States of America and the California Department of Fish and Game ("Long Term Monitoring Team"), to study and monitor the effects of the Landfill Project upon the surrounding desert areas, which monitoring effort shall have the highest priority call upon appropriations from the 15% portion of the expenditures. The Long Term Monitoring Team shall coordinate its efforts with those of the National Park Service funded pursuant to Subsection A hereof, to the maximum extent practicable, in order to avoid duplication of effort.

In addition, a contingency fund shall be established from funds available after the appropriations for the Long Term Monitoring Team, for the purpose of providing a funding source for the implementation of contingency or response measures identified by the Long Term Monitoring Team or oversight committees to mitigate impacts to affected species which have not been covered under the AB 3180 Monitoring and Reporting Program or permitting conditions. The contingency fund shall be established and maintained as follows: In each of the first four (4) years that the $1.00 per ton tipping fee is paid, $75,000.00 (or such lesser amount that is available after appropriations to the Foundation and for the Long Term Monitoring Team have been made) per year shall be deposited into the contingency fund; in each of the fifth and sixth years, $100,000.00 (or such lesser amount that is available after appropriations to the Foundation and for the Long Term Monitoring Team have been made) per year shall be deposited into the contingency fund, with the goal of establishing and maintaining a contingency fund totaling $500,000.00. If the funds in the contingency fund do not aggregate $500,000.00 by the end of the sixth year, all monies available each year after appropriations to the Foundation and for the Long Term Monitoring Team have been made shall continue to be deposited until the contingency fund totals $500,000.00. Once the contingency fund reaches $500,000.00, it shall be maintained at such level so that any funds disbursed shall be replenished (after appropriations to the Foundation and for the Long Term Monitoring Team have been made).

D. **Project Locations.** Annual acquisition expenditures by the Trustee shall be restricted to or for the benefit of the following specific project locations:

(1) Joshua Tree National Park Inholdings. This area consists of private inholdings located within the Joshua Tree National Park. Notwithstanding the foregoing, the ten percent (10%) mandatory payment to the Foundation, as set forth in Section A of this Article V is intended to be utilized for this purpose, among others, and therefore, only in extraordinary circumstances should additional funds be allocated for such acquisitions from the balance of annual appropriations.

(2) Chuckwalla Bench / Desert Tortoise Habitat Area. This area is generally bounded on the west by the Orocopia Mountains, on the north by Toe of Slope and on the east by the San Bernardino National Forest boundary.

(3) Northwestern Foothills of the San Jacinto Mountains. This area is generally bounded on the west by Highway 79, on the north by Toe of Slope and on the east by the San Bernardino National Forest boundary.

(4) Snow Creek Habitat Area and Wildlife Corridor. This area is generally bounded on the west by the Santa Rosa Mountains National Scenic Area boundary, on the south by the San Bernardino National Forest boundary, on the north by the Whitewater Wilderness Study area, and on the east by the Windy Point area.

(5) Whitewater River and Mission Creek. This area is generally bounded on the west by the San Bernardino National Forest, on the south by Interstate Highway 10, on the north by Big Morongo Creek, and on the east by Highway 62.

(6) Morongo Canyons. This area is generally bounded on the west by Highway 62 and Big Morongo Canyon, on the north by Little Morongo Canyon, on the south by Toe of Slope, and on the east by Joshua Tree National Park.

(7) Santa Rosa Mountains National Scenic Area. This area is generally bounded on the west by the San Bernardino National Forest boundary, on the south by the ridge line, on the north by Toe of Slope, and on the east by the County line.

(8) Indio Hills. This area generally consists of the Coachella Valley, Willow Hold and Edom Hill Preserves and one or more wildlife and sand transport corridors linking the Indio Hills with the Little San Bernardino Mountains.

(9) Mecca Hills. This area is generally bounded on the west and south by the Coachella Canal, on the north by Interstate Highway 10, on the east by Meccacopia Road (between Box Canyon and the Orocopia Mountains).

(10) Orocopia Mountains. This area is generally bounded on the west by Meccacopia Road, on the north by Interstate Highway 10, on the south by the Coachella Canal and Salt Creek, and on the east by the Chuckwalla Bench/Desert Tortoise Habitat Area.

(11) Chuckwalla Mountains. This area is generally bounded on the west by the Chuckwalla Bench/Desert Tortoise Habitat Project Area, on the north by Interstate Highway 10, on the south by the Chocolate Mountains Aerial Gunnery Range, and on the east by the Little Chuckwalla Mountains.

(12) Whitewater River Delta. This area encompasses the mouth of the Whitewater River where it empties into the Salton Sea.

(13) Salt Creek / Dos Palmas Springs. This area is generally bounded on the west by the Salton Sea, on the north by the Coachella Canal, on the south by the limits of the Salt Creek watershed, and on the east by the Chocolate Mountains.

(14) Multiple Species Habitat Conservation Plan. Areas designated for acquisition pursuant to any Multiple Species Habitat Conservation Plan for the Coachella Valley adopted and approved by the Board of Supervisors of Riverside County.

(15) Anza Borrego Desert State Park. This area consists of privately held inholdings within the exterior boundaries of the Park, located within Riverside County.

(16) Wilderness Areas. Areas designated as Wilderness Areas by the Bureau of Land Management, pursuant to the laws of the United States.

(17) Other Acquisitions. Recognizing that the projects listed in items (1) through (16) of this Paragraph D shall have the highest acquisition priority, if the Advisory Committee, as defined in Article 7, advises the Trustee that acquisitions within the projects listed in subparagraphs (1) through (16) have been reasonably met, then funds may be spent in other project areas not specifically listed which are significant for the protection of open space, wildlife habitat, cultural or archaeological resources, or for the implementation of other multiple species habitat conservation plans. All expenditures pursuant to the provisions of this subparagraph (17) shall require the consent of four of the five Co-Trustees.

ARTICLE 6

Successor Co-Trustees, Compensation, Expenses and Organization

A. **Trustee and Successor Co-Trustees.** The Co-Trustees shall consist of those individuals who serve, from time to time, as Members of the Board of Supervisors of Riverside County, California. The term of each such Co-Trustee shall be coterminous with such Co-Trustee's term as Supervisor. No accounting shall be required by any Co-Trustee upon the termination of such Co-Trustee's term.

B. **Compensation and Expenses.** Co-Trustees shall receive no compensation for their services. However, they shall be entitled to charge the Trust Estate with reasonable expenses. such expenses include the fees and expenses of such agents, employees, advisors and professionals as they may employ during the administration of the Trust, including but not limited to a Financial Officer, as set forth in Paragraph E of this Article 6.

C. **Meetings of Trustee, Chair and Delegation of Power.** The Trustee shall meet at such time and place and with such frequency as the Trustee may determine from time to time. A majority of the Co-Trustees shall constitute a quorum at any meeting of the Trustee. The act of the majority of the Co-Trustees shall be considered the act of the Trustee if acting at a meeting at which a quorum is present, except as otherwise provided herein. That Co-Trustee who then serves as Supervisor of the Fourth District, Board of Supervisors of Riverside County, California shall serve as Chair of meetings of the Trustee. A Co-Trustee may from time to time, by a writing delivered to the Chair, delegate to such Chair or to another Co-Trustee any of their powers as Co-Trustee of the Trust. Any such delegation shall terminate upon delivery by the Co-Trustee to the Chair of written notice of termination of delegation. The Chair is authorized to sign all contracts, notes, conveyances and other papers, documents and instruments in writing in the name of the Trust.

D. **Third Party Reliance.** Third parties dealing with the Trust may rely on Schedule B attached hereto reflecting the current members of the Board of Supervisors. This Schedule shall be updated whenever a change occurs in the composition of membership. The Schedule shall also identify the Chair of the Co-Trustees as the Supervisor of the Fourth District, who shall be authorized to sign all contracts, notes, conveyances, and other papers, documents and instruments in writing on behalf of the Trust. For purposes of conveying, transferring, granting, leasing or acquiring title to real property, water and water rights, the Trust's interest shall vest as "The Eagle Mountain Environmental Mitigation Trust dated _____."

E. **Financial Officer.** The Trustee may elect or appoint a Financial Officer who need not be a Co-Trustee, and such other assistants to the Financial Officer as the Trustee deems appropriate. The Financial Officer shall be responsible for the receipt, maintenance and disbursement of all funds of the Trust Estate and for the safekeeping of all properties of the Trust. The Financial Officer shall keep or cause to be kept books and records of account and records of all properties of the Trust. Upon request, the Financial Officer shall prepare or cause to be prepared financial statements or accountings for the Trust upon an annual or more frequent basis. The Financial Officer shall be responsible for the establishment of a Land Conservancy Fund to be maintained as a segregated, interest-bearing account to hold funds of the Trust Estate as identified in Article 3 of this Declaration of Trust in such depositary or depositaries as is designated by the Trustee. Trust Estate funds shall be disbursed upon the check or draft of the Trust signed by those Co-Trustees or other individuals as may be authorized from time to time by the Trustee.

ARTICLE 7

Advisory Committee to Trustee

A. **Purpose.** The Trustee shall have an Advisory Committee appointed by the Trustee for the purpose of preparing recommendations to the Trustee on the expenditure of funds of the Trust Estate. Within those funding policies and guidelines as shall be developed from time to time by the Trustee, the Advisory Committee shall develop and implement a grant or award application procedure for purposes of soliciting, evaluating and establishing priorities among land acquisition proposals and other funding and loan requests, and shall then report such recommendations to the Trustee. The Advisory Committee shall also make recommendations regarding annual expenditures and long-term funding priorities from time to time as requested by the Trustee.

B. **Composition.** The Advisory Committee shall be appointed by the Trustee on an annual basis, and shall consist of the following nine (9) individuals, all of whom shall be residents o Riverside County:

(1) Two (2) members of the Board of Supervisors of Riverside County, California;

(2) Two (2) citizens appointed by the Board of Supervisors of Riverside County, California, one of whom shall be a Native American;

(3) Two (2) citizens nominated by the Coachella Valley Mountains Conservancy;

(4) One (1) citizen nominated by The Nature Conservancy;

(5) One (1) citizen nominated by The Sierra Club; and,

(6) One (1) citizen nominated by The Desert Protective Council.

In addition, each of the following organizations shall be entitled to appoint one representative who shall attend but have no vote at meetings of the Advisory Committee: the California Department of Fish and Game; the United States Department of the Interior Fish and Wildlife Service; the United States Department of the Interior Bureau of Land Management; the United States Department of the Interior National Park Service; and the University of California Natural Reserve System. Representatives or citizens to be appointed by entities, including the Trustee, shall be selected by such entities in their discretion. Vacancies on the Advisory Committee shall be filled for the unexpired portion of the term in the same manner as provided in the case of original appointment.

C. **Meetings; Quorum.** The Advisory Committee shall meet at least annually and more frequently as shall be determined by such Committee within those directives, rules and regulations as the Trustee may adopt from time to time. The Trustee shall also designate the quorum and voting requirements for the Advisory Committee with respect to those matters which come before such Committee.

ARTICLE 8

Revocation and Amendment of Declaration of Trust

This Declaration of Trust may be amended or restated and amended by unanimous vote of the Trustor(which shall include any successor owner and operator of the Landfill Project) and Trustee, at a duly-held meeting of the Trustee or by unanimous written consent of the Trustor and Trustee, provided that no amendment shall authorize the Trustee to conduct the affairs of this Trust in any manner or for any purpose contrary to the provisions of §501(c)(3) of the Internal Revenue Code of 1986 as now in force or amended, nor shall any such amendment or restatement be inconsistent with the primary purposes of the Trust as set forth in Article II hereof. Notice of any revocation, modification or amendment of this Declaration of Trust shall be provided to the Attorney General, State of California, Charitable Division.

The Trustee are authorized to form and organize a non-profit public benefit corporation under the laws of the State of California, the purpose of which corporation shall be limited to accomplishing those general purposes identified in Article 2 above. Such corporation, when organized, shall have the power to administer and control the affairs and property and to carry out the uses, objects, and purposes of this Trust. Upon the creation of such corporation, the Trustee is authorized and empowered to convey, transfer, and deliver to such corporation all the property and assets to which this Trust may be or become entitled. The charter, articles, bylaws and other organizational documents and provisions for the organization and management of such corporation and its affairs and property shall be consistent with the terms of this Trust.

ARTICLE 9

General Provisions

A. **Bonding.** All employees or agents handling funds of the Trust Estate shall be bonded as required by law or as required by the Trustee.

B. **Tax Year.** The tax year of the Trust shall be a calendar year.

C. **Tax-Exempt Organization Restrictions.** The Trust is organized and operated exclusively for charitable, educational and scientific purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, as subsequently amended (hereinafter the "Code"). Notwithstanding any other provision of this Declaration of Trust, the Trust shall not

conduct or carry on any activities not permitted to be conducted or carried on (i) by any entity exempt from federal income tax under the provisions of the Code or (ii) by an entity contributions to which are deductible under Code Section 170(c)(2). No substantial part of the activities of the Trust shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the Trust shall not participate in or intervene in (including the publishing or distribution of statements) any political campaign on behalf of (or in opposition to) any candidate for public office. The property of the Trust is irrevocably dedicated to the purposes set forth in Article 2 of this Declaration of Trust, and no part of the net income or assets of the Trust shall inure to the benefit of, or be distributable to, any Trustee of the Trust or to any other private individual, except that reasonable compensation may be paid for services rendered to, or reimbursement for expenses incurred for, the Trust, affecting one or more of its purposes. Upon the termination, revocation or winding up of the Trust, its assets remaining after payment, or provision for payment, of all debts and liabilities of the Trust shall be distributed to one or more exempt organizations of the kind described in the Code, and shall not inure to the benefit of or be distributable to any Trustee of the Trust or other private individual.

C. **Annual Accounting or Financial Statements.** An accounting or financial statements shall be prepared and provided to the Co-Trustees as soon as reasonably practicable after the close of the Trust's tax year. The financial statements shall contain in appropriate detail the following: the assets and liabilities of the Trust Estate as of the end of the tax year; the principal changes in assets and liabilities of the Trust Estate during the tax year; the revenue or receipts of the Trust for the tax year; the expenses or disbursements fo the Trust for both general and restricted purposes for the tax year. Any accounting ro financial statements furnished to the Co-Trustees shall be accompanied by any report of independent accountants, or if there is no such report, the certificate of the Financial Officer of the Trust that such statements were prepared without audit from the books and records of the Trust. Except as otherwise required in this Paragraph C, no accounting shall be required to be made or provided to any beneficiary of the Trust.

D. **Trustee Construction of Instrument.** The Trustee may construe this instrument, and any action taken relying upon such construction shall be binding on all concerned and shall fully protect the Trustee even though it may subsequently be determined that such construction is erroneous.

E. **Fiduciary Liability.** Except for any matter involving a Trustee's own individual willful misconduct or gross negligence, no Trustee hereunder shall incur any liability by reason of any error of judgment, mistake of law, or any action of any kind taken or omitted to be taken hereunder if in good faith reasonably believed by the Trustee to be in accordance with the provisions and intent hereof. No Trustee hereunder shall be liable for any action taken or not taken in reliance on the opinion of any counsel, agent or other representative, provided such counsel, agent or other representative was selected by the Trustee with reasonable care and in good faith.

F. **Governing Law.** This Trust has been accepted by Trustee in the State of California and, unless otherwise provided in this instrument, its validity, construction and all the rights under it shall be governed by the laws of that state.

G. **Rule Against Perpetuities.** This Trust shall terminate and all assets of the Trust Estate shall be distributed in accordance with Paragraph C above no later than twenty-one (21) years after the death of the last member of the group composed of the Co-Trustees and all of their lawful issue alive on the date of execution of this Declaration of Trust.

EXECUTED at Riverside, California, this ___ day of _____, 199__.

_____
Co-Trustee

_____
Co-Trustee

_____
Co-Trustee

_____
Co-Trustee

_____
Co-Trustee

WE CERTIFY that we have read the foregoing Declaration of Trust consisting of twelve (12) pages, excluding this page signed by us, and that it correctly states the terms and conditions under which the Trust Estate is to be held, managed and disposed of by the Trustee. We approve the Declaration of Trust in all particulars, and request the Trustee to execute it.

Dated: _____, 199__, at Riverside, California.

_____
President, Mine Reclamation Corporation, Trustor

_____
Secretary, Mine Reclamation Corporation, Trustor

SCHEDULE A

We certify that the foregoing schedule, designated *Schedule A*, describes property transferred and delivered by us to Trustee this date as property to be administered in accordance with that Declaration of Trust executed by us under date of _____.

Dated: _____

_____
Co-Trustee

_____
Co-Trustee

_____
Co-Trustee

_____
Co-Trustee

_____
Co-Trustee

Appendix V
Appraisal Information

Appendix V
Summary of Updated Appraisal of Exchange Lands

December 1996

Appendix V

Summary of Updated Appraisal of Exchange Lands

In accordance with the requirements of the Federal Land Policy and Management Act (FLPMA), as amended, and regulations thereunder, the Bureau of Land Management (BLM) has obtained an updated appraisal of the exchange lands, including the Selected (BLM) Lands, the Offered (Kaiser) Lands, and the reversionary interest in the patented lands conveyed to Kaiser in 1955 pursuant to Private Law 790. A preliminary Appraisal Report, with a valuation date of September 25, 1996, has been prepared by David J. Yerke, Inc. in accordance with the Uniform Appraisal Standards for Federal Land Acquisitions and submitted to the BLM. The Appraisal Report is currently being reviewed by the BLM and will not be finalized until it is approved by the BLM.

According to the preliminary Appraisal Report, the market search area included over 3,600 square miles of remote mountainous and desert lands within eastern Riverside County, with a sales history of approximately 120 transactions dating back to January, 1993. The sales comparison analysis was narrowed to 16 sales occurring since January, 1995 based on overall compatibility with the subject lands. The preliminary Appraisal Report indicates that market values in the area have declined since 1990 and are currently at substantially lower levels than comparable sales used in the June 1993 Appraisal Report.

Selected (BLM) Lands. The Selected Lands consist of approximately 3,481 acres of federal lands within and around the Project site administered by the BLM, including federal lands subject to mining and mill site claims held by Kaiser. In the preliminary Appraisal Report, the fair market value of the Selected Lands (excluding the PL 790 patented lands discussed below) was determined to be $268,000, or an average of approximately $77 per acre, using the sales comparison appraisal approach, and based on the acreages of mountainous lands ($50 per acre) and level desert lands ($115 per acre) within the Selected Lands.

PL 790 Patented Lands/BLM Reversionary Interest. The PL 790 Patented Lands consist of 460.63 acres within and around the townsite area, which were patented by the BLM to Kaiser in 1955 pursuant to PL 790. Although PL 790 indicates a total acreage of approximately 465 acres, which is the acreage figure noted in the Draft EIS/EIR (see Section 2.1.1.3), survey records indicate a total acreage of 460.63, which is the figure used by the Appraiser. The patent contains a reversionary interest in the United States in the event that the property is not used for a continuous period of 7 years as a camp site, mill site, or other purposes incidental to mining. The reversionary interest of the United States in these lands will be removed as part of the land exchange. Although the nature of the reversionary interest is less than a fee interest, the BLM determined that, for the purposes of appraising the value of the reversionary interest, the Appraiser should value the interest as unimproved patented lands in fee (exclusive of improvements), not merely as a reversionary interest. This

methodology would increase the compensation that BLM would review from Kaiser in exchange for these property rights.

In the preliminary Appraisal Report, the fair market value of the PL 790 Patented Lands in fee, as raw lands without any Kaiser-owned improvements, was determined to be $49,000, or an average of approximately $106.38 per acre, using the sales comparison appraisal approach, and based on the acreage of mountainous lands ($60 per acre) and level desert lands ($115 per acre) within the PL 790 Patented Lands.

Offered (Kaiser) Lands. The Offered Lands consist of seven noncontiguous parcels owned by Kaiser along the Eagle Mountain Rail Line, comprising a total of approximately 2,846 acres. In the preliminary Appraisal Report, the fair market value of the Offered Lands was determined to be $296,500, using the sales comparison appraisal approach, and based on the acreages of mountainous lands ($50 per acre) and level desert lands ($115 per acre) within the Offered Lands.

Thus, the total appraised value of the Selected Lands and reversionary interest has been determined to be $317,000, and the appraised value of the Offered Lands has been determined to be $296,900, subject to review and approval of the Appraisal Report by the BLM. The difference of $20,100 would be paid by Kaiser to BLM as an equalization payment.

Appendix W
Exterior Lighting Analysis of Proposed Eagle Mountain Landfill and Recycling Center

Appendix W
Exterior Lighting Analysis of Proposed Eagle Mountain Landfill and Recycling Center

Prepared by

CH2M HILL

December 1996

Introduction

The following report is a summary of the exterior lighting impacts from the proposed Eagle Mountain Project to visitors within Joshua Tree National Park (JTNP). This report is based upon field investigation by Don Wagner of CH2M HILL during the week of October 15, 1996. The study consisted of: (1) evaluating each of the identified observation points during the day; (2) measuring ambient light levels after dusk; and (3) identifying visible light sources in each area after dusk. Figure 1 identifies each of the observation locations.

Ambient light levels were measured using a Tektronix J17 LumaColor light meter with a Tektronix J1811 illumenance head. The meter can measure values as low as 0.001 lux. The illumenance head was mounted on a tripod, and measurements were taken vertically facing the Project site, and horizontally facing upward. The measured values are in lux. One lux equals one lumen per square meter (lm/m^2). There are 10.76 lux per foot-candle.

There is no readily available technology to measure actual nighttime sky glow, and ambient light levels are the only measurable factor (personal communication, David Crawford, IDA 1996). The International Darksky Association (IDA), an association of professionals dedicated to reducing sky glow, has developed a rough methodology to estimate skyglow. This methodology has been used to assist in evaluating the potential for Project impacts.

Affected Environment

The primary source of light pollution in the Chuckwalla Basin in the vicinity of the Project are the directly visible light sources, which generally consist of unshielded luminaires. There are three major light sources within the immediate vicinity of the Project—the Eagle Mountain Pumping Station, the town of Eagle Mountain, and the detention facility on the edge of the town. The Eagle Mountain Pumping Station is located south of the Project, at the foot of the Eagle Mountains on the western edge of the Chuckwalla Valley boundary with the JTNP. This is a substantial facility with a large substation. The substation site, pump station, and surrounding area are extensively illuminated. The lights appear to include both High Pressure Sodium (HPS) and Metal Halide lights. The majority of the lights do not have cutoff optics, and are visible many miles away. Presently, in the town of Eagle Mountain there are approximately 40 non-cutoff roadway lights (approximately 22 in operation), 5 cutoff-type roadway lights (4 in operation), and approximately 8 mercury vapor wall lights (all in operation). Additionally, there are stadium flood lights at the local school. The County detention facility also has HPS flood lights in the recreation yards and many HPS wallpack luminaires around the exterior of the buildings. The recreation yard flood lights are equipped with glare shields but are aimed so that there is a glow around the area.

A secondary source of light pollution in the area is skyglow. The main source of sky glow is light from non-cutoff types of luminaires that direct light upward above the plane of the luminaire. The secondary source of skyglow is reflected light off of items being illuminated—usually ground surface. The terrain around the Project site helps to minimize

this secondary contribution because it has low reflectivity and high topographic diversity, which disperses the light. Atmospheric conditions in this area help to minimize skyglow. Typical nighttime conditions are clear skies, calm winds, and low humidity. Skyglow increases with an increase in relative humidity and with an increase in wind blown dust during and after a dust storm. Within this region, sky glow is not very apparent, because of the nighttime conditions mentioned above, but directly visible light sources can be seen across long distances.

Currently, the town of Eagle Mountain and the detention facility generate approximately 2 million lumens of light. Additional light (not measured during the field observations) is present at the pump station. Of this total, approximately 100,000 lumens of light (or 5 percent of the total light in the town, not including the school lighting) is directed into the atmosphere above the plane of the luminaires, or light sources. Using a 7 percent reflectance factor from the surfaces where the light strikes (i.e., the ground or buildings) approximately another 130,000 lumens of light are reflected into the atmosphere. A total of about 230,000 lumens of light that contribute to skyglow currently enter the atmosphere above the town and project site general area, plus additional light (not measured) originating from the detention facility. For purposes of comparison, an average 100 watt light bulb produces 1,740 lumens, while a single typical sports stadium light may produce 140,000 lumens.

Twelve locations were reviewed during the nighttime hours in order to determine the visibility of existing-area lighting Of the 12 sites, 6 were located either within the JTNP boundaries or adjacent to the boundary. The six specific sites are identified in Figure 1 and described below in more detail. The specific sites were selected because they either corresponded to sites used as Key Observation Points (KOP) for the Draft EIS/EIR visual analysis, they addressed areas of the JTNP where the Project site is not directly visible, or they had views of existing sources of light in close proximity to the JTNP.

Site 1

This site is located at the foot of the Coxcomb Mountains to the east of the Project site and corresponds to KOP 1 in the Visual Resource analysis. The observation point is where the aqueduct intersects with the steel power transmission towers at the JTNP boundary. Lights could be seen from the Eagle Mountain town site, the aqueduct pumping station, the area water well, I-10, various residences along Kaiser Road, Desert Center, and a couple of other locations that could not be identified to the south. Light meter readings in this area were 0.012 lux horizontal, and 0.009 lux vertical. At the time of the readings the moon was still present above the horizon.

Site 2

This site is located 1.6 miles from Kaiser Road off the paved road leading to the aqueduct pumping station, and corresponds to KOP 2 in the Visual Resources analysis. This site is to the south of the Project site. Lights from the town were visible. There was a noticeable sky glow around the area where the detention facility is located. There were also light sources

glow around the area where the detention facility is located. There were also light sources visible at the aqueduct pump station, an area water well, and various residences. From this location the aqueduct pump station could also be heard. Light meter readings were 0.000 lux horizontal, 0.000 lux vertical facing the Project site, and 0.035 lux vertical facing the aqueduct pump station.

The detention facility has recreation yards that are illuminated with flood lights; there are also numerous wall-pack type lights around the buildings that do not appear to have glare shields, or cutoff optics.

Site 3

This site is located at the Pinto Wells and is slightly north of KOP 3 in the Visual Resources analysis. This site is located to the northeast of the Project site. From this location there were no lights visible from the Project site area or any other source. There were no indications of sky glow apparent over any of the horizons. Light meter readings were 0.000 lux vertical facing the Project site, and 0.000 lux horizontal.

Site 6:

This site is located 0.7 miles North of I-10 and approximately 300 yards to the west of Eagle Mountain Road, close to KOP 6 in the Visual Resources analysis. This site is south of the Project site. No lights were visible from the Project area, but the aqueduct pumping station could be seen, and to the south, I-10 could be seen. Light meter readings were 0.000 lux vertical facing the Project site, and 0.000 lux horizontal.

Site 10:

This site is located within JTNP on Black Eagle Mine Road, 7.3 miles from the main park road. This site is west of the Project site. From this location there were no lights visible in any direction including the Project site. There were no indications of sky glow from the direction of the Project site. Light meter readings were 0.000 lux vertical facing the Project site, and 0.000 lux horizontal.

Site 12

This site is located on Iron Age Road approximately 0.1 miles from Twenty Nine Palms Highway. This site is north of the Pinto Basin within JTNP, north of the Project site, and 23 miles east of the North Park road. From this location there were a number of lights visible to the east, west, and north, but none were visible to the south in the direction of the Project site. There was no indication of sky glow from the south. Light meter readings were 0.000 lux vertical facing the Project site, and 0.000 lux horizontal.

Note:

At any given time during the observation period (three nights total), there were at least five aircraft visible over the park area and many could be easily heard.

Project Impacts

The landfill would operate 6 days per week, 16 hours per day, from 7:00 a.m. to 10:00 p.m. The intermodal railyards, landfill waste recovery facility, and other areas of the site that receive waste would have lighting of some type during the night hours of operation. In most of the areas, lighting would consist of the minimum level of security lighting required. Security lighting would remain on after operations shut down from 10:00 p.m. to 7:00 a.m. During night operating hours, lighting in the intermodal rail yards would be restricted to the lights on the overhead intermodal cranes and a lighted walkway for crane operators to use to move between the cranes and the buildings and yard entrance/exit. Each of the two rail yards would have a maximum of 5 cranes, for a total of 10 cranes for the entire Project. Each crane would light about 1/2 acre. The lighted walkway area would be approximately 10 feet wide by 7,500 feet long. A 2-acre working landfill face would also operate during this period. Vehicles traveling to and from the working face and equipment operating at the working face would use headlights after dark.

The increase in night lighting would only occur during the dusk to 10 p.m. period of operations. The Project's hours of night lighting would be greater during fall and winter months, and fewer during spring and summer months. For example, the Project would be illuminated for approximately 1 to 2 hours after dusk during spring and summer months, as opposed to 4 to 5 hours during fall and winter months.

In order to minimize direct and indirect lighting impacts to the surrounding area and to JTNP, the following measures would be incorporated into the Project:

- No up-lighting would be used;
- Any required floodlights would have glare shields installed, and be aimed at a 45° angle (minimum) toward the ground;
- Cutoff-type roadway lights would be used around the perimeter of areas requiring lighting, and would be aimed onto the site, away from JTNP. If required, side shields would be added to further minimize light trespass;
- Light levels would be reduced after 10:00 p.m. to minimal levels required for security and safety;
- Lighting types would be reviewed with the NPS; low pressure sodium lights are proposed as the primary source for exterior lighting, supplemented with some quartz lights on the

cranes and high pressure sodium lights where required for the type of work being illuminated;

- All existing non-cutoff type lights within the Project site and town site would be changed to cut-off type lights. Mercury lights would be replaced with sodium lights; and

- The Project site lighting levels would be designed not to exceed the Illuminating Engineering Society (IES) recommended levels for the proposed activities.

With the above features incorporated into the Project, direct visual impacts to visitors within the JTNP would be minimized. From within the JTNP boundaries there would not be a measurable increase in light levels (measured to 0.01 lux). Direct views of the Project site from within the JTNP would be able to see vehicle and equipment headlights and the light at the waste receiving areas until operations shut down at 10:00 p.m. After that time, only security lighting would be visible. Locations within JTNP that have direct views of the Project site can also see, at a minimum, the Eagle Mountain town site, the detention center, the Eagle Mountain school, and the Metropolitan Water District pumping station. These locations are within the north Eagle Mountains (represented by Site 2) and the southwestern Coxcomb Mountains (represented by Site 1). Lighting from Desert Center, Lake Tamarisk, and cars on Kaiser Road is also visible. Although the Project would increase the amount of light in the area near the town site, offsite light levels in the JTNP would not increase and much of the new light will not be visible because of the use of cut-off fixtures. The Project is an additional light source in an area that currently has many visible light sources.

By utilizing cutoff type light exclusively for the Project site lighting, the Project would not increase the amount of light directed upward above the plane of the light. However, the contribution of light reflected from the ground surface would increase. As described above, there are currently about 230,000 lumens of light entering the atmosphere in the immediate site area, plus additional light from the detention facility, that contribute to potential skyglow. Field observations indicate that this level of light does not create skyglow visible from areas of the JTNP to the southwest, north and west beyond the intervening mountains.

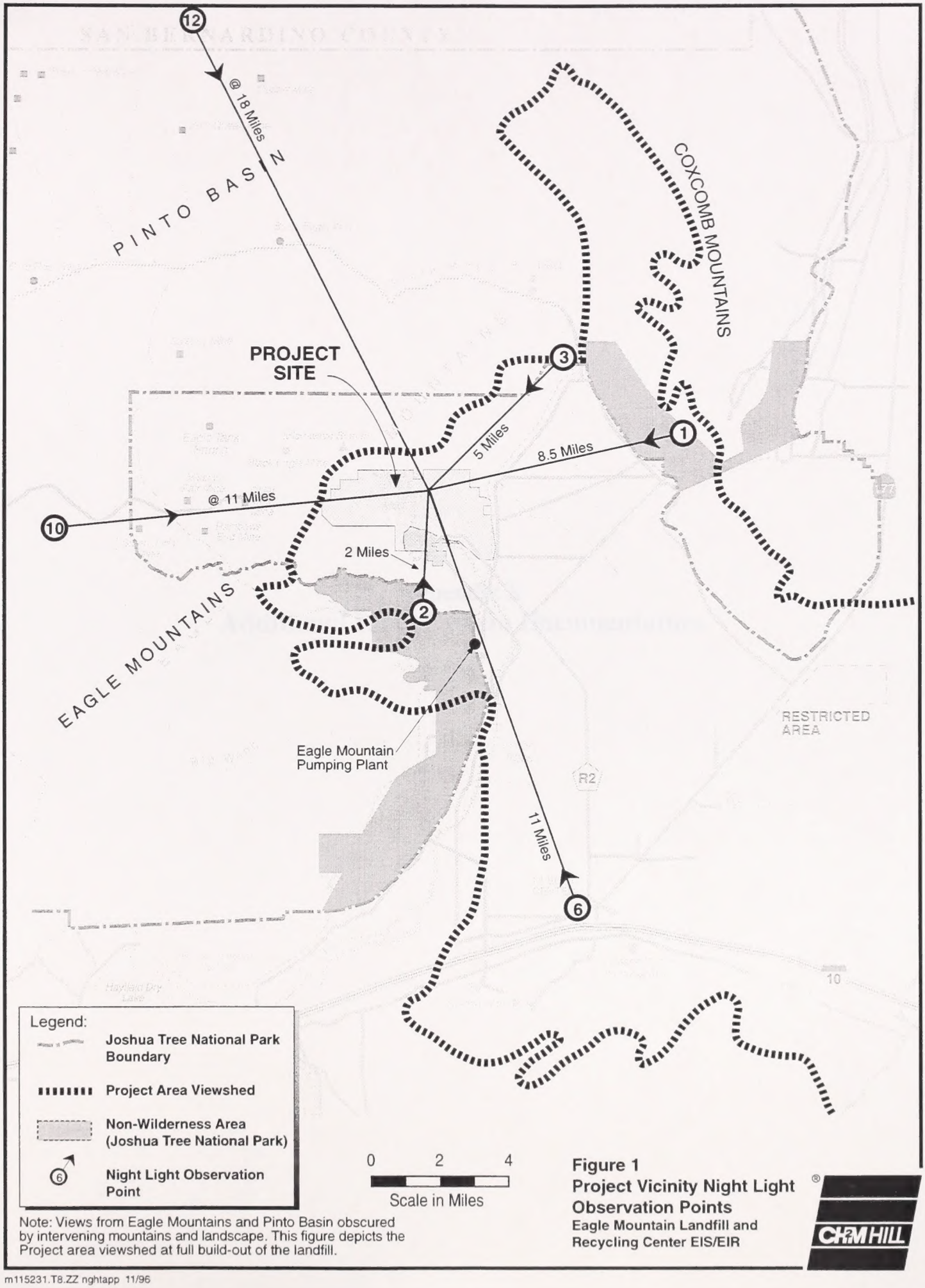
The Project would increase light levels by approximately 3 million lumens of light during operation (to a total of 5 million lumens). None of this light would be directed up into the sky. With the proposed mitigation and using the reflectance of the ground at approximately 7 percent, only 400,000 lumens of light would be reflected back into the atmosphere and contribute to skyglow. After 10:00 p.m., when operations shutdown, the site security lighting would increase light levels to 2.1 million lumens of light (a 5 percent increase), of which about 240,000 lumens would contribute to skyglow.

A review of literature and contacts with universities and lighting consultants did not identify any existing methodology that is directly applicable to estimating skyglow impacts in situations comparable to the proposed Project. However, the International Darksky Association (IDA) has developed a formula (in the IDA's information sheet titled "Estimating the Level of Skyglow Due to Cities) for calculating the level of skyglow,

compared to natural background skyglow levels, which would be visible to viewers observing the night sky at varying distances from urban areas of different sizes. While not directly applicable to the proposed Project, the IDA formula ("Walker's Law") provides a means to assess the degree of change in existing skyglow that might be perceptible at different distances from the Project site.

The results of applying Walker's Law would indicate that the Project's contributions to skyglow between the hours of dusk and 10 p.m. would only be perceptible in the immediate vicinity of the Project site, up to a distance of approximately 2 miles. Skyglow generated by the existing Townsite, detention facility, and pump station is already perceptible in these locations. According to Walker's Law, at a distance of 2 miles of the Project site (Site 2) existing skyglow is approximately 12 percent greater than natural (no night lighting) sky. According to Walker's Law, Project operations would increase skyglow to 22 percent above natural night lighting at a distance of two miles. At Site 3, which is approximately 5 miles from the Project site, Project operations would increase skyglow about 2 percent above natural conditions or 1 percent above existing skyglow conditions. At greater distances, Walker's Law predicts a 1 percent or smaller increase in skyglow attributable to the Project. The Walker's Law formula does not take into account intervening features, such as the Eagle Mountains, which would further reduce the level of skyglow.

The increase in light compared to natural background levels is relatively low, and even at the nearest viewing location (Site 2, two miles from the Project site), the increase in light levels would be very minor with or without the Project. Because no skyglow is currently visible from locations within JTNP without direct views of the site, it is difficult to determine whether this increase in reflected light levels would create noticeable skyglow within those areas of JTNP nearest the Project site. It is possible that wilderness areas within JTNP to the north and southwest, nearest the Project site, may have a view of nighttime sky glow where no skyglow is currently visible. After operations shut down, skyglow would decrease to a level similar to the existing condition and would not be noticeable from within JTNP. Based on this analysis, other parts of JTNP wilderness areas, and the more heavily used JTNP areas in the western portion of JTNP, would not experience a noticeable increase in nighttime skyglow because of their distance form the Project site and the intervening topography.

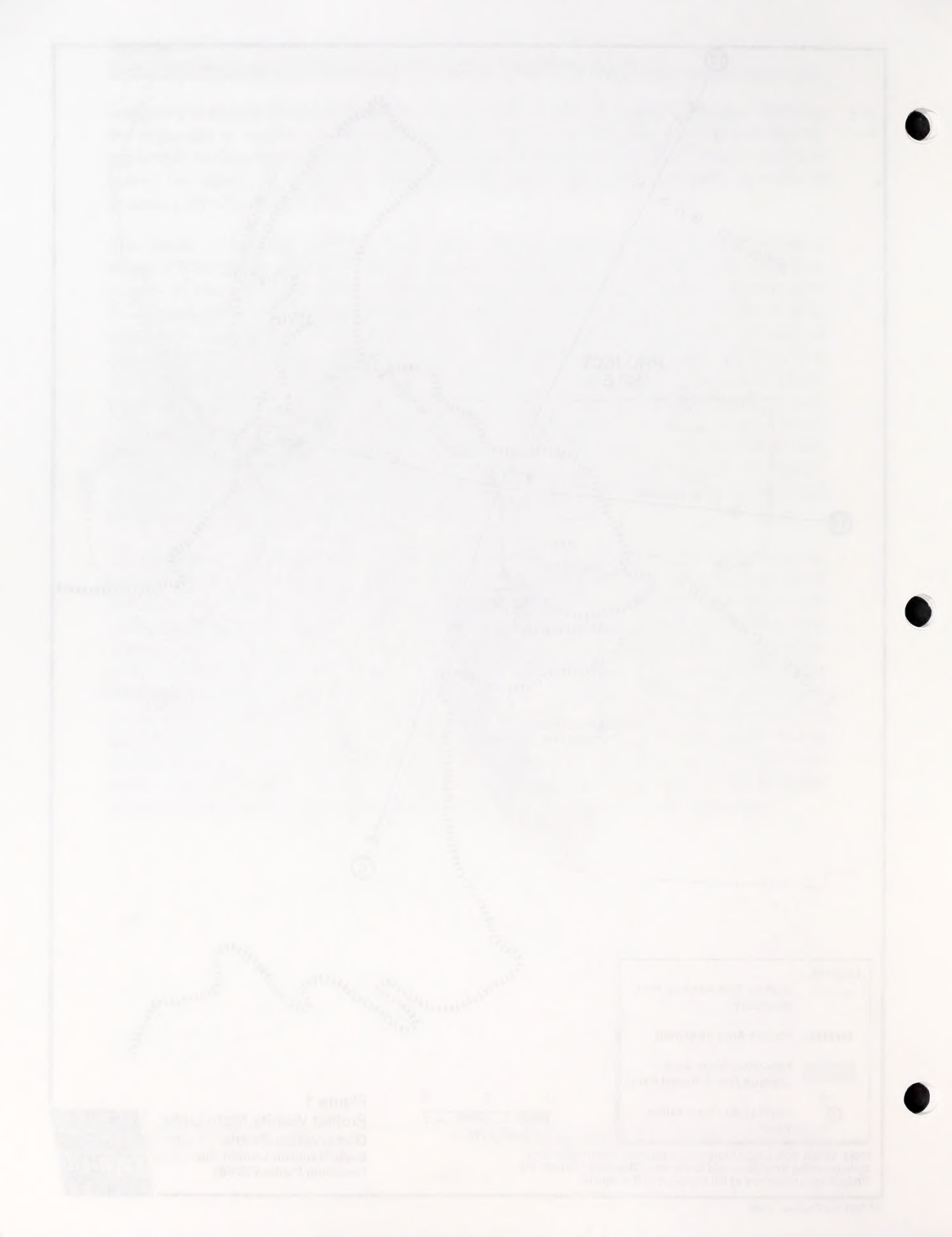


Note: Views from Eagle Mountains and Pinto Basin obscured by intervening mountains and landscape. This figure depicts the Project area viewshed at full build-out of the landfill.

Figure 1
Project Vicinity Night Light Observation Points
Eagle Mountain Landfill and Recycling Center EIS/EIR

CH2MHILL

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Appendix X
Additional Liner System Documentation

GeoSyntec Consultants

1100 Lake Hearn Drive, N.E. • Suite 200
Atlanta, Georgia 30342-1523 • USA
Tel. (404) 705-9500 • Fax (404) 705-9400

30 August 1996

Mr. Gary W. Johnson
Vice President, Landfill Development
Mine Reclamation Corporation
960 Tahquitz Canyon Way
Suite 204
Palm Springs, California 92262

Subject: Supplement to GeoSyntec 23 February 1994 Letter Report
"Geosynthetic Clay Liner (GCL) for the Side-Slope Liner System
Eagle Mountain Landfill"

Dear Mr. Johnson:

INTRODUCTION

The purpose of this letter is to provide supplementary information on the use of a geosynthetic clay liner (GCL) for the side-slope liner system of the Eagle Mountain Landfill in Riverside County, California. Specifically, this letter provides supplementary information on a fifth potential mechanism for GCL hydration, namely, water absorption along overlapped, but unseamed, portions of the geomembrane backing component of the GCL. This fifth potential mechanism was evaluated based on conversations with the third-party consultant (i.e., HDR Engineering, Inc.) retained by the County of Riverside Planning Department to review the Draft Environmental Impact Statement/Environmental Impact Report for the landfill. The results of the subject evaluation are presented in the remainder of this letter. The letter also addresses any impacts of this potential hydration on the minimum slope stability factor of safety for the landfill.

Information on the potential for hydration of the GCL that will be used in the side-slope liner system for the Eagle Mountain Landfill was previously provided to Mine Reclamation Corporation (MRC) in the 23 February 1994 GeoSyntec Consultants (GeoSyntec) report referenced above. In that report, GeoSyntec evaluated four potential

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mechanisms for GCL hydration under operating conditions at the Eagle Mountain Landfill. The four potential mechanisms are: (i) rainfall or surface-water runoff during construction; (ii) leakage through defects in the geomembrane component of the composite liner; (iii) vapor diffusion of leachate or landfill gas through the geomembrane component of the composite liner; and (iv) absorption of liquid or vapor from the landfill foundation. The report concluded that use of a GCL product with a geomembrane backing "*results in a very high degree of confidence that the GCL will not hydrate under field operating conditions*". As noted above, this letter addresses a fifth potential mechanism for GCL hydration.

GCL DESIGN AND INSTALLATION PLAN

The configuration of the GCL in the side-slope liner system for the Eagle Mountain Landfill is shown in Figure 1. The GCL overlap detail for the side-slope liner system is shown in Figure 2. As shown in these figures, the design of the side-slope liner system includes a GCL overlain by an 80-mil (2.0-mm) thick high density polyethylene (HDPE) geomembrane having a textured lower side (to improve interface shear strength between the GCL and geomembrane) and a smooth upper side (to allow relative displacement of the overlying geotextile cushion layer and waste without overstressing the geomembrane). The GCL that will be specified for use in the side-slope liner system consists of a bentonite core material glued to a 30- to 40-mil (0.75- to 1.0-mm) thick textured HDPE geomembrane backing, with the HDPE backing placed against the foundation soil and the bentonite core, in turn, overlain by the 80-mil (2.0-mm) thick HDPE geomembrane (i.e., the bentonite will be sandwiched between HDPE geomembranes). The proposed GCL material will be supplied in rolls that are approximately 15 to 20 ft (4.5 to 6 m) wide by 200 ft (61 m) long and weigh about 4,000 lbs (17.8 kN).

GCL installation on the landfill side slopes will be conducted from liner system benches spaced at vertical intervals of about 30 ft (9 m). The GCL roll will be transported to the appropriate location on the bench using an all terrain forklift equipped

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with a stinger, or other suitable equipment. Once positioned, vice grips with rope leads will be attached to the leading edge of the GCL. Workers at the base of the sideslope increment being constructed will pull the leading edge of the GCL down the slope using the vice grips and rope leads. Once in place, the GCL will be temporarily secured in the anchor trench using sandbags and the back edge of the GCL will then be cut using a hand-held hook blade. The forklift will then be moved forward to install the next strip of GCL.

Adjacent GCL strips will be installed with a 6 in. (150 mm) overlap, as shown in Figure 2. For the reasons described in the next section of this letter, there is no need to seam the geomembrane backing components of adjacent GCL strips. The on-site CQA representatives will observe the installed GCL for conformance with the specifications. The GCL will then be covered by the 80-mil (2.0-mm) thick HDPE geomembrane, installed in a manner similar to the GCL installation. Once all of the side-slope geosynthetics are installed, the temporary sandbags holding the geosynthetics in the anchor trench will be removed and the trench will be backfilled with soil and compacted in accordance with the specification requirements. The GCL and geomembrane will also be required to be installed and subjected to quality assurance monitoring and testing in accordance with the industry-standard guidance given in the USEPA Technical Guidance Document "*Quality Assurance and Quality Control for Waste Containment Facilities*", September 1993, EPA/600/R-93/182.

POTENTIAL FOR GCL HYDRATION

There exists little potential for significant hydration of the GCL through the unseamed overlaps of the GCL proposed for the Eagle Mountain Landfill under the anticipated landfill operating conditions. The reasons for this conclusion are given below.

- There exists no foreseeable mechanism whereby the overlap between GCL panels will have access to water. As described in the 23 February 1994 report referenced above, neither rainfall or surface-water runon present potential

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sources of water due to the local climate and engineering controls included in the landfill design.

- The GCL for the side-slope liner system will be installed on a soil foundation layer compacted at or dry of the soil's modified Proctor optimum moisture content. Foundation soil, in general, will not provide a source of moisture, due to the presence of the geomembrane backing of the GCL. This backing provides a capillary barrier between the GCL and foundation soil.

- The bentonite core of the GCL will contact the foundation soil intermittently along the edge of the bottom panel at the overlap between panels (Point A in Figure 2). Where contact occurs, moisture will migrate from the foundation soil to the GCL bentonite core due to the higher matric suction in the bentonite core compared to the foundation soil. However, the volumetric flow from the foundation soil into the bentonite core will be small due to the "clay like" nature of the soil-water characteristic curve for the Foundation Layer Type C, which will be dominated by the fine tailings component of this material. As water is initially drawn out of the foundation soil by the bentonite core at the contact interface, the matric suction in the foundation soil will increase until it equilibrates with the matric suction in the bentonite core. Using data in Section 7 of the Eagle Mountain Landfill Report of Waste Discharge (ROWD), the compaction moisture content of the subgrade (Foundation Layer Type C) for the GCL will be on the order of 10 to 15 percent and the degree of saturation will be on the order of 50 percent. A reduction in water content of as little as 5 percent will cause the matric suction in the fine tailings to increase to a level comparable to the bentonite core of the GCL. As the matric suction increases, the unsaturated hydraulic conductivity of the fine tailings will decrease. These interactions will greatly limit the moisture movement from the foundation layer to the exposed edge of the bentonite core.

- The qualitative conclusion described above is consistent with the findings of large-scale experiments reported by Estornell and Daniel ["Hydraulic

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Conductivity of Three Geosynthetic Clay Liners", in *Journal of Geotechnical Engineering*, ASCE, Vol. 118, No. 10, 1992, pp. 1592-1606]. In their tests, an overlapped GCL with HDPE backing was subjected to a low normal stress between 60 to 190 psf (3 to 9 kPa) and a 2 ft (600 mm) head of water applied to the geomembrane backing side of the GCL. No leakage through the overlap was observed during the five month test period, and the advancement of the wetting front into the bentonite core was only 2 to 3 in. (50 to 75 mm) over the test duration.

Based on the foregoing qualitative discussion and large-scale laboratory test results, there exists little potential for significant hydration of the GCL through the unseamed overlaps under the anticipated landfill operating conditions.

SLOPE STABILITY FACTOR OF SAFETY

Since there is little potential for significant hydration of the GCL through the unseamed overlaps, there is also little potential for this hydration mechanism to adversely affect the landfill slope stability factor of safety. To evaluate the potential for a reduction in factor of safety due to GCL hydration, it is conservatively assumed that the zone of hydration at each overlap is 6 in. (150 mm) wide. This assumed width of hydration is equal to twice the upper end of the range of widths measured by Estornell and Daniel [1992] for the case where the GCL overlap is provided access to free (i.e., non-capillary) water. In the Eagle Mountain Landfill side-slope liner system application, the GCL will not have access to free water. For a GCL with a 15-ft (4.5-m) wide roll width, a zone of hydration 6 in. (150 mm) wide results in the hydration of about 7 percent of the GCL. Using the same GCL properties as presented in the 23 February 1994 report referenced at the beginning of this letter, this amount of hydration results in an approximate 5 percent reduction in average GCL shear strength. This reduction in shear strength, should it occur, would have essentially no affect on the minimum slope stability factor of safety for the landfill because: (i) the reduction in shear strength is very small (equivalent to a reduction in angle of internal friction for the

RECYCLED AND RECYCLABLE

unhydrated GCL from 20° to 19.2°); and (ii) the side-slope GCL represents the critical (i.e., least strength) liner system interface or component along only a relatively small portion of the landfill side slope area (i.e., only along the landfill benches which represent not more than 36 percent of the total area of the side-slope liner system).

CONCLUSION

In summary, there exists little potential for significant hydration of the Eagle Mountain Landfill GCL component of the side-slope liner system through unseamed overlaps of adjacent GCL panels. To the extent that any small amount of hydration occurs, the associated reduction in slope stability factor of safety will be negligible.

If you require additional information, or if you would like to discuss the contents of this letter, please do not hesitate to contact me.

Sincerely,

Rudy Bonaparte

Rudolph Bonaparte, Ph.D., P.E.
Principal

Copy to: David Mares, CRPD
Nowland Bambard, HDR
Tom Peters, CH2M Hill

GE3586-18/GA960675.DOC

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Appendix Y
Southern California Metropolitan Water District and Kaiser/Mine Reclamation Corporation Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING ("MOU") is entered into this 14th day of December, 1992, by and between THE METROPOLITAN WATER DISTRICT OF THE SOUTHERN CALIFORNIA, a public entity, ("MWD,") KAISER STEEL RESOURCES, INC., a Delaware corporation, ("KSR") and MINE RECLAMATION CORPORATION, a California corporation, ("MRC") (KSR and MRC shall sometimes jointly and severally be referred to herein as "KSR/MRC").

RECITALS

A. KSR/MRC has proposed to develop a landfill project serviced by railroad and trucking operations at the abandoned Eagle Mountain Mine in unincorporated Riverside County (the "Landfill Project").

B. The development and operation of the Landfill Project will impact the existing MWD facilities, right-of-ways, operations, public access in the Eagle Mountain area and will require the granting by MWD to KSR of certain additional right-of-way easements with the written concurrence, if legally required, of the United States Department of the Interior Bureau of Land Management.("BLM")

C. The parties through this MOU desire to memorialize certain agreements reached between them with respect to use of access roads, granting of additional rights-of-way, construction of drainage facilities, and protection of existing MWD facilities and water supply.

NOW THEREFORE, the parties agree as follows:

1. **Eagle Mountain Road** As part of the Landfill Project, the existing public county maintained Eagle Mountain Road from Interstate 10 to the Eagle Mountain Road Extension as shown on Exhibit A attached hereto (the "Road") is to be vacated by the County of Riverside and shall become a private road pursuant to a joint FLPMA right-of-way and easement grant from BLM to MWD and KSR. KSR/MRC shall have the right to use the Road. As between MWD and KSR/MRC, KSR/MRC will assume the full responsibility and cost for the reconstruction, maintenance and repair of the Road in conformance with the County of Riverside's current standards. KSR/MRC also will construct/reconstruct access connections to existing MWD access roads at the three locations along the Road presently used by MWD. MWD shall be entitled to continue to use the Road for MWD construction, maintenance and operations vehicles as well as for access to and from Interstate 10 and Kaiser Road by MWD personnel and/or families and their invitees, including school bus and services vehicle access. MWD shall continue to use the Road for access for MWD's facilities in the

event of abandonment of the Road by KSR/MRC. In the event of such abandonment appropriate documentation shall be filed by KSR/MRC with the BLM. Plans for the reconstruction of the Road and construction of the Eagle Mountain Road Extension (as described below) have been provided to MWD for review and written approval. KSR/MRC shall take reasonable and appropriate measures to enforce the speed limit for the Road (anticipated to be 30 mph) as is required by the County of Riverside as a condition to its approval of the Landfill Project. Such enforcement shall include notifying all truck and other vehicle operators employed or authorized by KSR/MRC and all other parties authorized to use the Road of the speed limit, posting traffic speed limit signs, and taking such other steps as are reasonably necessary to enforce such speed limit.

2. **Eagle Mountain Road Extension** The proposed Eagle Mountain Road Extension (the "Road Extension") will cross MWD lands. MWD agrees to grant easement crossings of its properties for the Road Extension to KSR as shown on Exhibit A attached hereto. Such crossings shall be constructed, operated, maintained and repaired by KSR/MRC at no cost to MWD. Each such grant shall be by easement deed subject to the prior written concurrence, if legally required, of the BLM and shall be subject to and compatible with MWD's title and use of its lands for the purpose for which they were acquired.

At one of the easement crossings, KSR/MRC shall, at no cost to MWD, construct, maintain and repair a drainage system adequate to convey and contain the overflow from the MWD Eagle Mountain Pumping Plant Reservoir at the Railroad and the Road Extension crossing and contain the overflow within the existing MWD's Eagle Mountain Wasteway Property. Plans for such drainage system shall be prepared and submitted to MWD for reasonable review and reasonable written approval prior to construction.

In order to protect the aqueduct, the Road Extension crossing shall be constructed in accordance with plans prepared and submitted to MWD for reasonable review and reasonable written approval prior to construction.

The existing agreement pertaining to railroad and telephone purposes between MWD and KSR's predecessor, Kaiser Steel Corporation, dated August 25, 1950, as renewed for 25 years through June 5, 1997, by agreement dated May 8, 1973, shall be amended to be consistent with this MOU and to provide for another 25 year renewal term that will commence on June 6, 1997.

Subject to such reasonable regulation as may be agreed upon by MWD and KSR/MRC, MWD and MWD's personnel, families or invitees including school buses shall have the same right to use the Road Extension as their right to use the Road. The same measures

required by KSR/MRC as to safety enforcement of the road shall apply to the road extension.

3. **Storm Water Runoff From Landfill** The proposed Landfill project is not expected to change the current drainage conditions affecting the Colorado River Aqueduct ("CRA") for many years. At some future date (eg. 50-85 years), KSR/MRC intends to change the current storm water runoff to some of the patterns that existed prior to the mining operations at Eagle Mountain. This KSR/MRC intention shall be subject to the review and written approval of the appropriate regulatory agencies. It is recognized that improvements or activities which may be installed or occur within the property owned by KSR will from time to time, change the volume, flow rate, and flow direction of any runoff. In that event, KSR/MRC shall submit drainage and grading plans to MWD for reasonable review and reasonable written approval prior to any changes in the volume, flow rate, or flow direction of any runoff. To minimize the flow rates directed downstream toward the CRA, a series of retention basins are planned. These flow rates shall be established by KSR/MRC and approved in writing by MWD and other jurisdictional governments. The KSR/MRC shall submit plans for MWD's review and written approval for the protection of MWD's property and the CRA prior to changes in the volume, flow rate, or flow direction of any runoff.

4. **Air Strip** KSR/MRC shall be allowed to use the existing air strip at Eagle Mountain owned and operated by MWD without charge subject to the prior written concurrence, if legally required, of the BLM, and shall be compatible with MWD's title and use of its lands for the purpose for which they were acquired. KSR/MRC shall maintain liability insurance in the minimum amount of $1,000,000. KSR/MRC shall be responsible for meeting all requirements of the California Division of Aeronautics at no cost or expense to MWD, resulting from the use of the air strip by KSR/MRC. KSR/MRC shall share in the maintenance of said landing strip in proportion to its use by KSR/MRC. Prior to using the air strip, KSR/MRC shall first telephone MWD's Gene Headquarters communication center to inform MWD's pilots of the expected time of use of the air strip. Further, all railroad traffic and train operation to the Landfill Project in close proximity to the air strip shall be conducted in a manner so as not to adversely affect operation, accessibility and regulation of the landing strip.

KSR, with the concurrence, if legally required, of the BLM, shall grant to MWD an easement for an extension of MWD's existing air strip, for drainage purposes between the existing air strip and the railroad, and for ingress and egress from Kaiser Road to the air strip as shown on Exhibit A, at no cost to MWD. Plans for any improvements to be constructed within the easement area

shall be submitted to KSR for reasonable review and reasonable written approval.

5. **Railroad Crossings** At all intersections of the Road and the Road Extension, to the private railroad line servicing the Landfill Project, KSR/MRC shall cause to be constructed, operated, and maintained standard Public Utilities Commission No. 9 crossing signals with guard arms and lights. KSR/MRC shall be responsible for obtaining electrical service for the operation of such crossings from the public utility servicing the area at no cost to MWD.

6. **Water Supply Protection** This MOU does not constitute any waiver of MWD's rights to utilize remedies available under water resource protection and other environmental protection laws and regulations to assure that the Landfill Project will not threaten to pollute water in MWD's Colorado River Aqueduct or groundwater in the Chuckwalla aquifer.

7. **Submission of Plans and Documents for Approval** All plans for KSR/MRC roads, railroad, grading, drainage and facilities which cross or impact MWD property shall be submitted to MWD for reasonable review and reasonable written approval prior to construction. Maintenance of such facilities by KSR/MRC will be in accordance with MWD requirements which may change from time to time. Whenever this MOU or MWD requires KSR/MRC to

submit plans, drawings or other documents to MWD for approval, said plans, drawings or other documents shall comply with the applicable portions of MWD's "Guidelines for Development in Area of Facilities, Fee Properties, and/or Easement of The Metropolitan Water District of Southern California" and "Metropolitan Water District of Southern California Guidelines for Legal Descriptions and Maps". Any disapproval or approval shall be in writing. A disapproval shall state the reason for disapproval and the changes which MWD requests to be made. KSR/MRC, upon receipt of a disapproval, shall revise such plans, drawings and related documents and shall resubmit them to MWD as soon as possible after receipt of notice of disapproval. MWD approval is not intended to duplicate any other governmental approvals required of KSR/MRC in connection with the development of the Landfill Project.

8. **Notification** Each party shall notify the other immediately in the event of any accident involving the Road, the Road Extension, Air Strip, or the private railroad.

9. **Costs To MWD** KSR/MRC shall reimburse MWD for all reasonable costs related to the Landfill Project. MWD requires a deposit in the amount of $40,000, to apply towards the cost of its review of KSR/MRC plans and documents. The final billing for such review will be based on the actual cost incurred, which will include materials, construction, inspection, surveying,

engineering plan review, administrative, and overhead charges calculated in accordance with MWD's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional.

In the event that MWD facilities have to be relocated or adjusted because of the Landfill Project, an estimate of costs will be made. If it is determined that MWD has prior rights in the affected area, an additional deposit will be requested.

10. **Successors and Assigns** Each covenant and condition contained in this MOU shall inure to the benefit of and be binding on the parties hereto , their respective heirs, personal representatives, assigns, and other successors in interest.

11. **Attorneys' Fees** If any party shall bring an action against the other arising out of this MOU, the party in whose favor the final judgment is entered shall be entitled to have and recover from the other party its reasonable attorneys' fees and other reasonable expenses in connection with such action or proceedings, in addition to its recoverable court costs.

12. **Indemnity**

a) KSR/MRC each assume all risk of loss to itself, which in any manner may arise out of this MOU and of each easement granted pursuant hereto by MWD. Further, KSR/MRC shall each indemnify and defend MWD and its directors, officers, and employees against any liability and expenses, including the reasonable expense of legal representation whether by special counsel or by MWD's staff attorneys, resulting from injury to or death of any person, or damage to any property, including property of MWD, or damage to any other interest of MWD, including but not limited to suit alleging noncompliance with any statute or regulation, which in any manner may arise out of this MOU and of granting of each easement pursuant thereto by MWD, or use by KSR/MRC or of each Easement, except where caused by the negligence or willful misconduct of MWD.

b) MWD assumes all risk of loss to itself, which in any manner may arise out of the use by MWD, its Employees and their invitees, including school buses, of the Road Extension, and the easements for the Air Strip extension, the drainage

easement, ingress and egress easement from Kaiser Road to the Air Strip. Further, MWD shall indemnify and defend KSR/MRC and its directors, officers, and employees against any liability and expenses, including the reasonable expense of legal representation whether by special counsel or by KSR/MRC staff attorneys, resulting from injury to or death of any person, or damage to any property, including property of KSR/MRC, or damage to any other interest of KSR/MRC, including but not limited to suit alleging noncompliance with any statute or regulation, which in any manner may arise out of the use of the Road Extension pursuant to this MOU, except wherein cause by the negligence or willful misconduct of KSR/MRC.

13. **REMEDIES**

a) If the grantor of any easement provided for herein determines that the grantee is in violation of the terms of an easement granted the grantee pursuant to this MOU, or that a violation is threatened, the grantor shall give written notice to the grantee of such violation to secure corrective action sufficient to cure the violation and, where the violation involves injury to the grantor's

property resulting from any use or activity inconsistent with the purpose of such easement, to restore the portion of the conveyed parcel(s) so injured. If the grantee fails to cure a violation within thirty (30) days after receipt of notice thereof from the grantor, or under circumstances where the violation cannot reasonably be cured within a thirty day period, or fails to continue diligently to cure such violation until finally cured, the grantor may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of such easement and this MOU to enjoin the violation, ex parte as necessary, by temporary or permanent injunction, to recover any damages to which it may be entitled for violation of the terms of such easement and this MOU, and to require the restoration of the conveyed parcel(s) to the condition that existed prior to any such injury. If the grantor, in its good faith and reasonable discretion, determines that circumstances require immediate action to prevent or mitigate significant damage to the underlying fee of conveyed parcel(s) or the grantor's facilities therein, the grantor may pursue its remedies under this paragraph without prior notice to the grantee or without waiting for the period

provided for the cure to expire. The grantor's rights under this section apply equally in the event of either actual or threatened violations of the terms of such easement, and the grantee agrees that the grantor remedies at law for any violation of the terms of this MOU and such easement are inadequate and that the grantor shall be entitled to the injunctive *relief described in this paragraph, both prohibitive and mandatory in addition to such other relief to which the grantor may be entitled, including specific performance of the terms of this MOU and such easement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. The grantor's remedies described in this section shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity.

b) Any costs incurred by any party in enforcing the terms of this MOU or any easement granted pursuant hereto including, without limitation, costs of suit and attorney's fees, and any costs of restoration necessitated by a violation of the terms of this MOU such easement shall be borne by the breaching party. If the prevailing party

prevails in any action to enforce the terms of this MOU or any easement granted hereto shall be entitled to cost of the suit including, without limitation, reasonable attorney's fees, shall be borne by the KSR/MRC.

c) Enforcement of the terms of this MOU and of any easement granted pursuant hereto shall be discretionary, and any forbearance to exercise any rights under such easement or this MOU in the event of any breach of any term of such easement by Grantee shall not be deemed or construed to be a waiver of such term or of any such easement or of any rights thereunder. No delay or omission in the exercise of any right or remedy upon any breach thereof shall impair such right or remedy or be construed as a waiver.

d) Nothing contained in this Agreement or any easement shall be construed to entitle any party to bring any action against any other party for any injury to or change in the conveyed parcels resulting from causes beyond it's control, including, without limitation, fire, flood, storm and earth movement, or from any prudent action taken by it under emergency conditions to prevent,

abate or mitigate significant injury to the underlying fee of such property or facilities therein resulting from such causes.

IN WITNESS WHEREOF, the parties have executed this MOU on the date first above mentioned.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

By _____

Title _____

KAISER STEEL RESOURCES, INC.

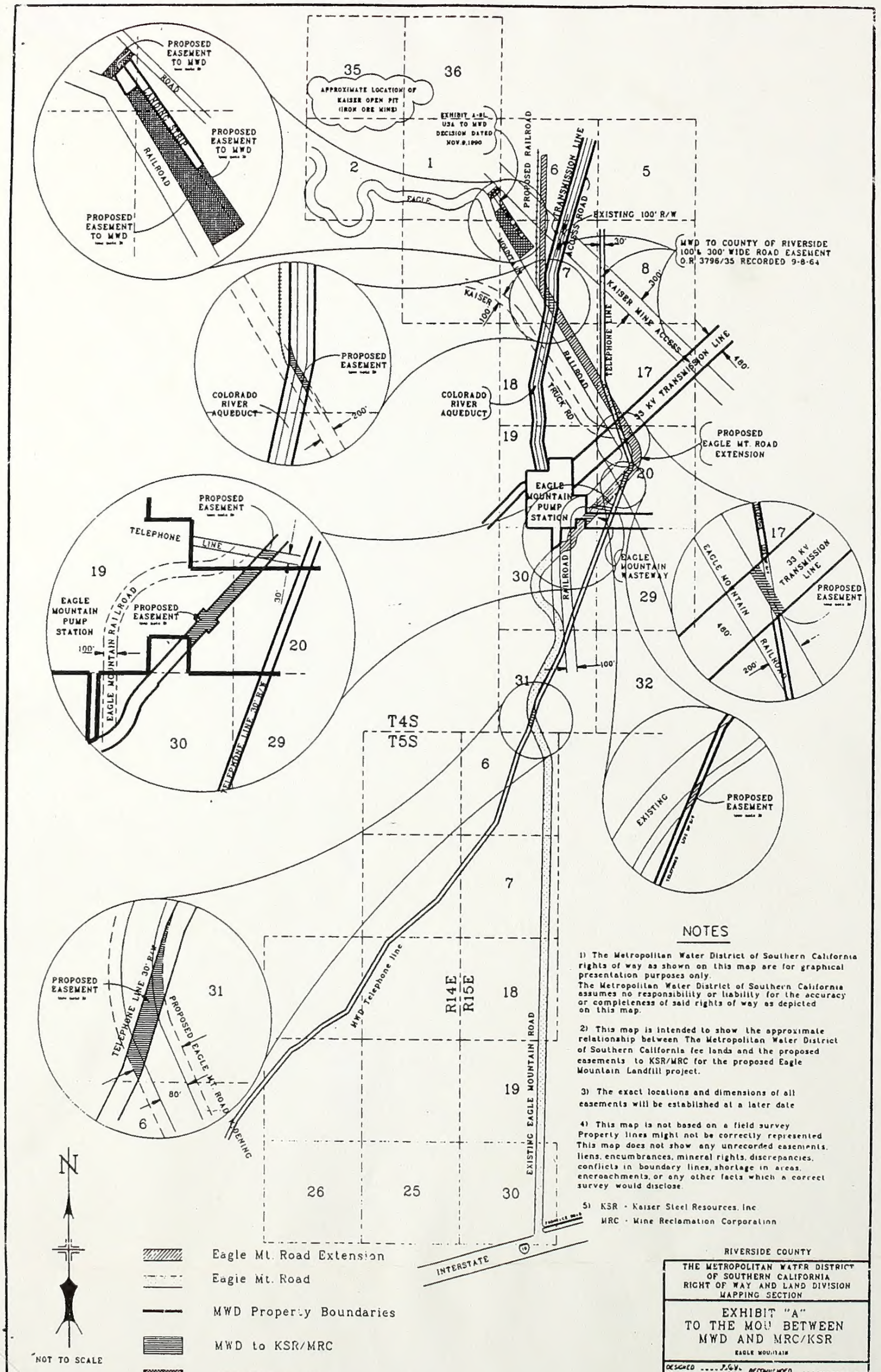
By _____

G. A. Fawcett
Executive Vice President

MINE RECLAMATION CORPORATION

By _____

Title RICHARD A. DANIELS PRESIDENT/CEO



NOTES

1) The Metropolitan Water District of Southern California rights of way as shown on this map are for graphical presentation purposes only.
The Metropolitan Water District of Southern California assumes no responsibility or liability for the accuracy or completeness of said rights of way as depicted on this map.

2) This map is intended to show the approximate relationship between The Metropolitan Water District of Southern California fee lands and the proposed easements to KSR/MRC for the proposed Eagle Mountain Landfill project.

3) The exact locations and dimensions of all easements will be established at a later date

4) This map is not based on a field survey
Property lines might not be correctly represented
This map does not show any unrecorded easements, liens, encumbrances, mineral rights, discrepancies, conflicts in boundary lines, shortage in areas, encroachments, or any other facts which a correct survey would disclose.

5) KSR - Kaiser Steel Resources, Inc
MRC - Mine Reclamation Corporation

RIVERSIDE COUNTY

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
RIGHT OF WAY AND LAND DIVISION
MAPPING SECTION

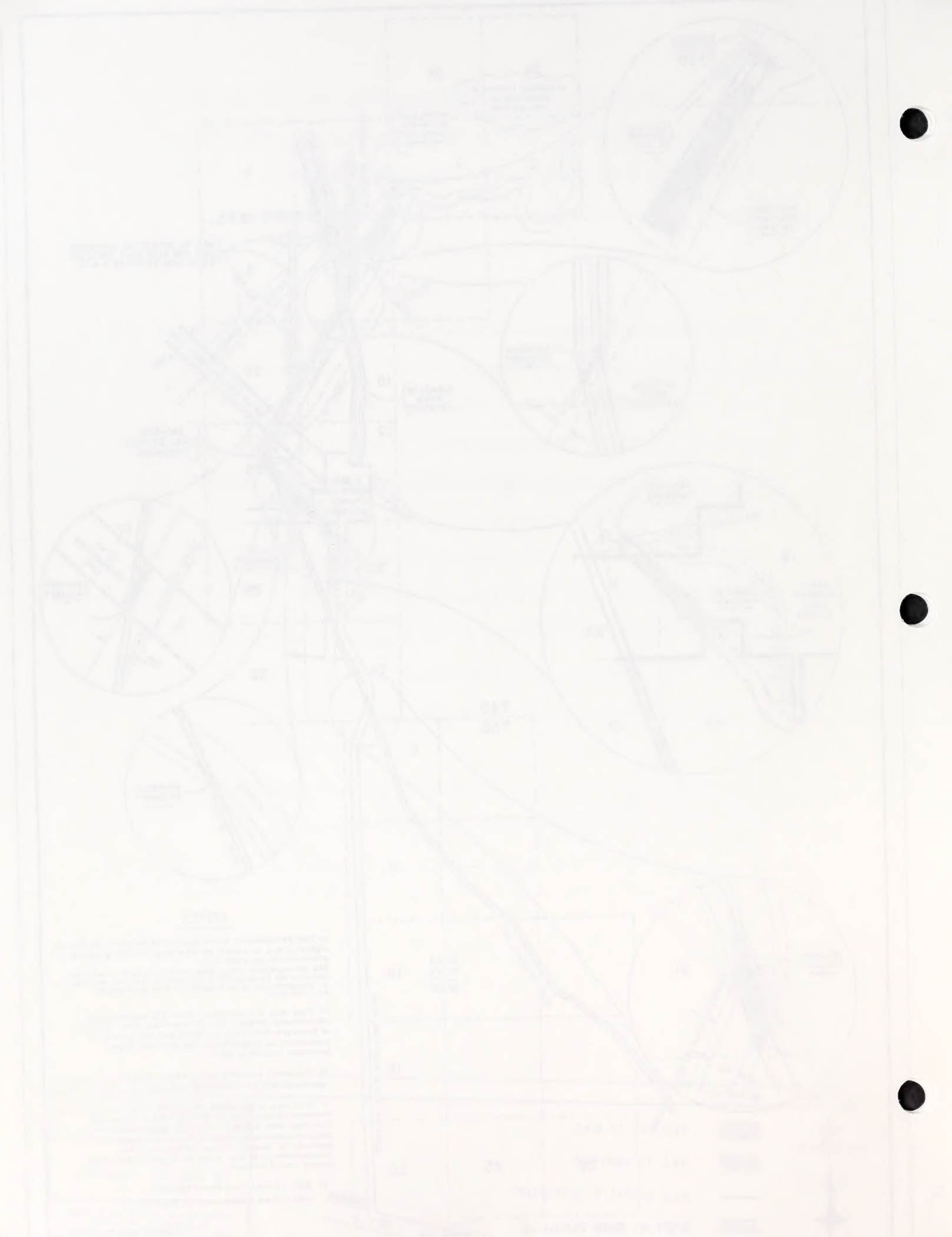
EXHIBIT "A"
TO THE MOU BETWEEN MWD AND MRC/KSR

EAGLE MOUNTAIN

DESIGNED	P.G.V.	RECOMMENDED	
DRAWN	A.O.B.	APPROVED	
CHECKED	G.V.C.		
WORK ORDER NO.	LOS ANGELES	09-28-1992	W.J. # ETC

/usr/u05890/eaglemt.dgn 07-DEC-1992

PREPARED ON INTERGRAPH "DO NOT MAKE MANUAL REVISIONS"



Appendix Z
Legal Descriptions for Parcels to be Transferred to Kaiser Eagle Mountain

EXHIBIT "A" June 2, 1993

KAISER EAGLE MOUNTAIN, INC.
FEE PARCELS TO BE TRANSFERRED TO THE
BUREAU OF LAND MANAGEMENT

DESCRIPTION

PARCEL 1:

East Half of East Half of Southeast Quarter of Section 21, Township 8 South, Range 11 East, San Bernardino Base and Meridian. (Contains 40 acres, more or less.)

PARCEL 2:

A triangular portion of land in the Northwest corner of Northwest Quarter of Section 23, Township 8 South, Range 11 East, San Bernardino Base and Meridian, the boundaries of said triangular portion being described as follows:

Starting at the Point of Beginning which is the Northwest section corner of said Section 23; thence South 1°59'34"West, along the West line of said Section 23 a distance of 834.50 feet; thence North 59°04'04"East, 1,559.70 feet to a point on the North line of said Section 23; thence North 88°35'26"West, 1,309.30 feet along the North line of said Section 23 to the Northwest section corner of said Section 23, which was the Point of Beginning. (Contains 12.5 acres, more or less.)

PARCEL 3:

The Northeast Quarter of Section 13, Township 8 South, Range 11 East, San Bernardino Base and Meridian. (Contains 160 acres, more or less.)

PARCEL 4:

All of Section 35, Township 7 South, Range 12 East;

Save and excepting therefrom, 10.0 acres condemned under Suit No. 2054-Y, United States of America vs. 112,613.67 acres of land, more or less, in Imperial and Riverside Counties, etc., et al. (Contains 630 acres, more or less.)

PARCEL 5:

The North Half of the Southwest Quarter, the Southeast Quarter of the Northwest Quarter and the South Half of the Northeast Quarter of Section 36, Township 7 South, Range 12 East, San Bernardino Base and Meridian;

01/07/97 TUE 13:56 FAX 909 697 5299 USDI BLM-CDD 060 002

Excepting therefrom all oil, gas, oil shale, phosphate, sodium, gold, silver, and all other mineral deposits contained in said lands, as reserved by the State of California in the Patent recorded October 21, 1948 in Book 1020, Page 533 of Official Records of Riverside County, California. (Contains 200 acres, more or less.)

PARCEL 6:

All of Section 31, Township 7 South, Range 13 East, San Bernardino Base and Meridian;

Excepting therefrom that portion taken by the United States of America under Decree of Condemnation recorded February 18, 1942, in Book 531, Page 459 of Official Records of Riverside County, California. (Contains 200 acres, more or less.)

PARCEL 7:

All of Section 5, Township 7 South, Range 14 East, San Bernardino Base and Meridian. (Contains 643.5 acres, more or less.)

PARCEL 8:

The West half of Section 21, Township 6 South, Range 14 East, San Bernardino Base and Meridian. (Contains 320 acres, more or less.)

PARCEL 9:

The West Half of the West Half of Section 16, Township 6 South, Range 14 East, San Bernardino Base and Meridian;

Excepting therefrom all oil, gas, oil shale, phosphate, sodium, gold, silver and all other mineral deposits contained in said lands, as reserved by the State of California in the Patent recorded October 21, 1948 in Book 1020, Page 533 of Official Records of Riverside County, California. (Contains 160 acres, more or less.)

Parcel 10:

The North Half and the North Half of the South Half of Section 27, Township 5 South, Range 14 East, San Bernardino Base and Meridian. (Contains 480 acres, more or less.)

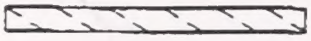
The areas described herein contain an aggregate 2846.0 acres, more or less.

E. Joseph Shaw, P.E. C-18784

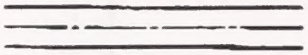
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EXHIBIT "B"

LEGEND



EASEMENT REQUIRED FOR DRAINAGE PURPOSES



RAILROAD RIGHT-OF-WAY



SECTION BOUNDARY

B.L.M. — BUREAU OF LAND MANAGEMENT

K.E.M., INC. — KAISER EAGLE MOUNTAIN, INC.

NOTE:

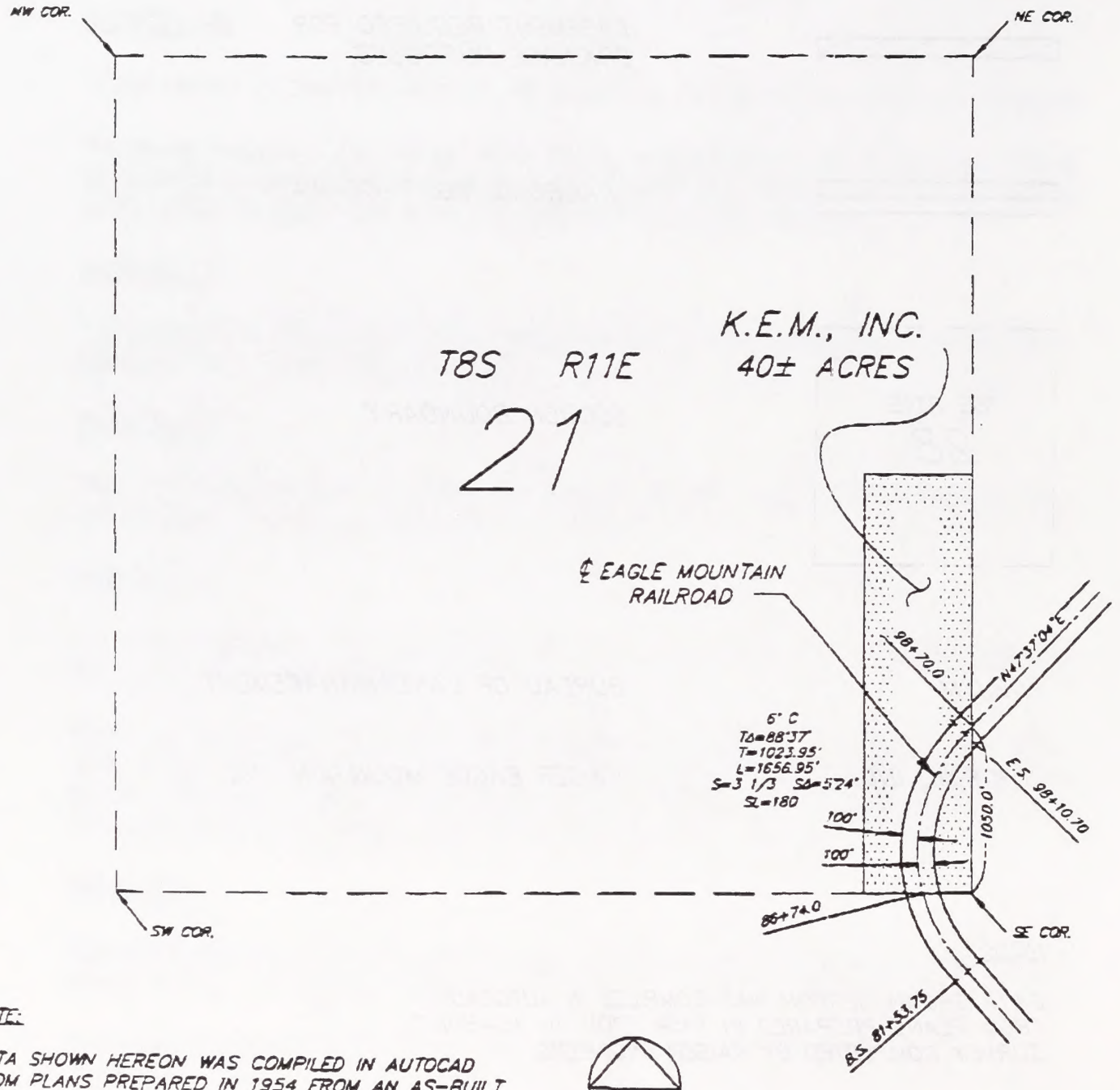
DATA SHOWN HEREON WAS COMPILED IN AUTOCAD FROM PLANS PREPARED IN 1954 FROM AN AS-BUILT SURVEY COMPLETED BY KAISER ENGINEERS.

ENGINEERING ASSOCIATES
[illegible] P.O. Box [illegible] - [illegible]
Phone (909) [illegible] FAX (909) [illegible]-0143
225 East Airport Drive, San Bernardino, California

JUNE 2, 1993

EXHIBIT "B"

KAISER EAGLE MOUNTAIN, INC.
FEE PARCELS TO BE TRANSFERRED TO THE BUREAU OF LAND MANAGEMENT



NOTE:

DATA SHOWN HEREON WAS COMPILED IN AUTOCAD FROM PLANS PREPARED IN 1954 FROM AN AS-BUILT SURVEY COMPLETED BY KAISER ENGINEERS.

SCALE: 1" = 1000'
JUNE 2, 1993

0 500 1000 2000

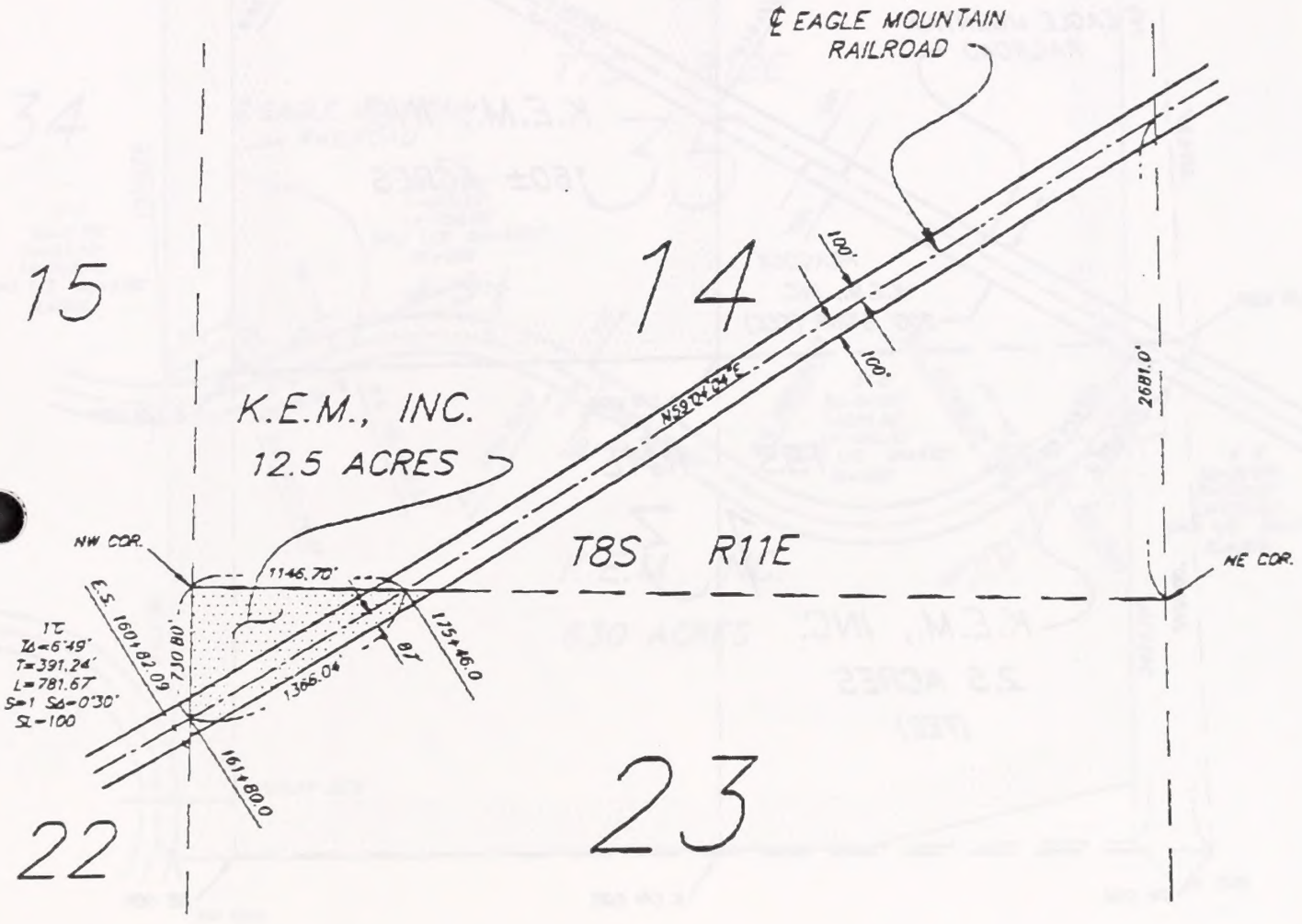
REGISTERED PROFESSIONAL ENGINEER
E. JOSEPH SHAW
No. C-18784
Exp. 06-30-97
CIVIL
STATE OF CALIFORNIA

ENGINEERING ASSOCIATES
P.O. Box 9057 ... 92812
(714) 680-6804 FAX (714) 680-6143
225 East Airport Drive, San Bernardino, California

01/07/97 TUE 13:57 FAX 909 697 5299 USDI BLM-CDD 060 005

EXHIBIT "B"

KAISER EAGLE MOUNTAIN, INC.
FEE PARCELS TO BE TRANSFERRED TO THE BUREAU OF LAND MANAGEMENT



NOTE:

DATA SHOWN HEREON WAS COMPILED IN AUTOCAD FROM PLANS PREPARED IN 1954 FROM AN AS-BUILT SURVEY COMPLETED BY KAISER ENGINEERS.

SCALE: 1" = 1000'
JUNE 2, 1993

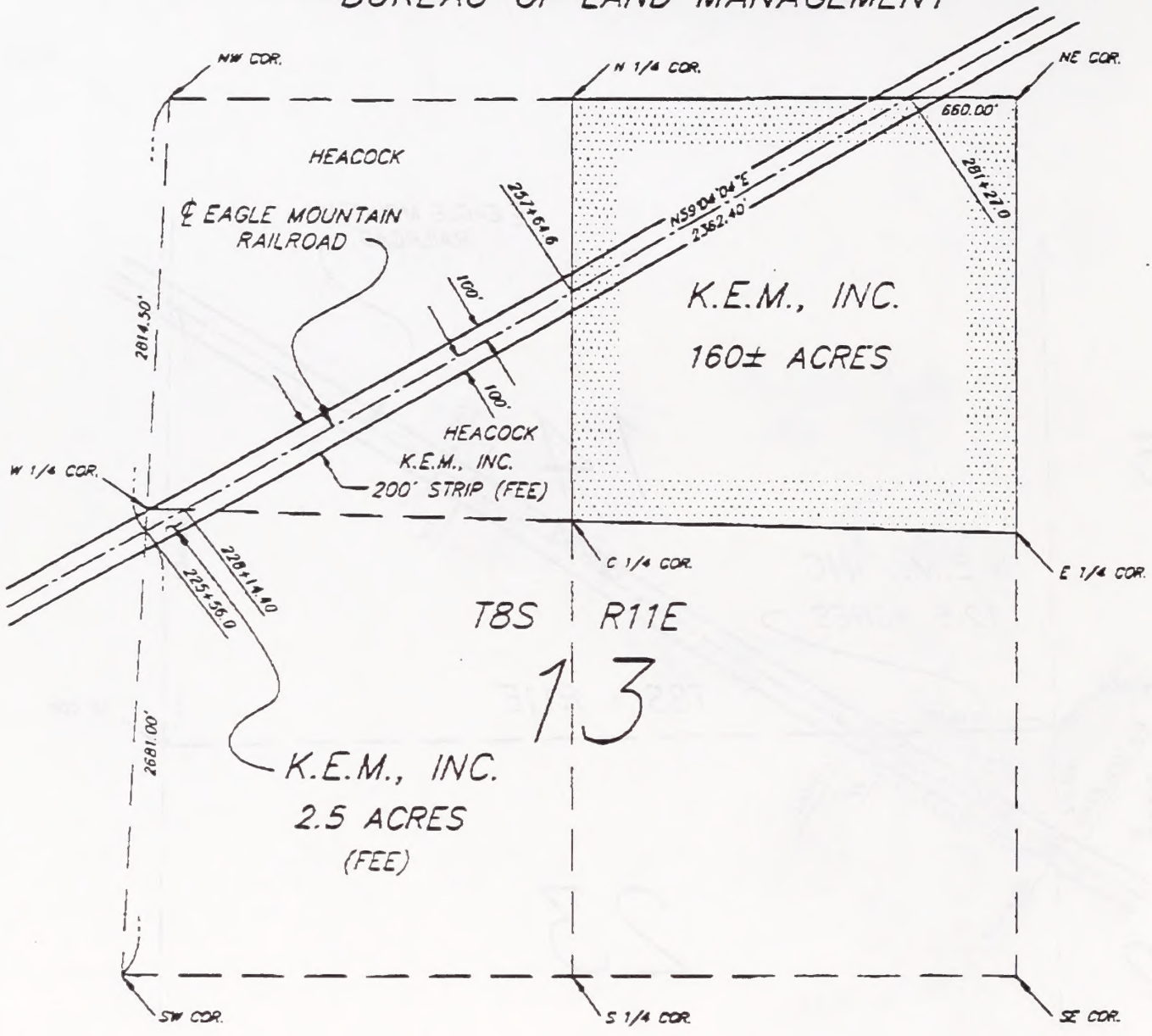
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REGISTERED PROFESSIONAL ENGINEER
JOSEPH SHAW
No. C-18784
Exp. 06-30-97
CIVIL
STATE OF CALIFORNIA

ENGINEERING ASSOCIATES
Mail P.O. Box 0067 - 92412
Phone (714)[illegible] FAX (714)[illegible]
220 East Airport Drive, San Bernardino, California

EXHIBIT "B"

KAISER EAGLE MOUNTAIN, INC.
FEE PARCELS TO BE TRANSFERRED TO THE BUREAU OF LAND MANAGEMENT



NOTE:

DATA SHOWN HEREON WAS COMPILED IN AUTOCAD FROM PLANS PREPARED IN 1954 FROM AN AS-BUILT SURVEY COMPLETED BY KAISER ENGINEERS.

SCALE: 1" = 1000'
JUNE 2, 1993

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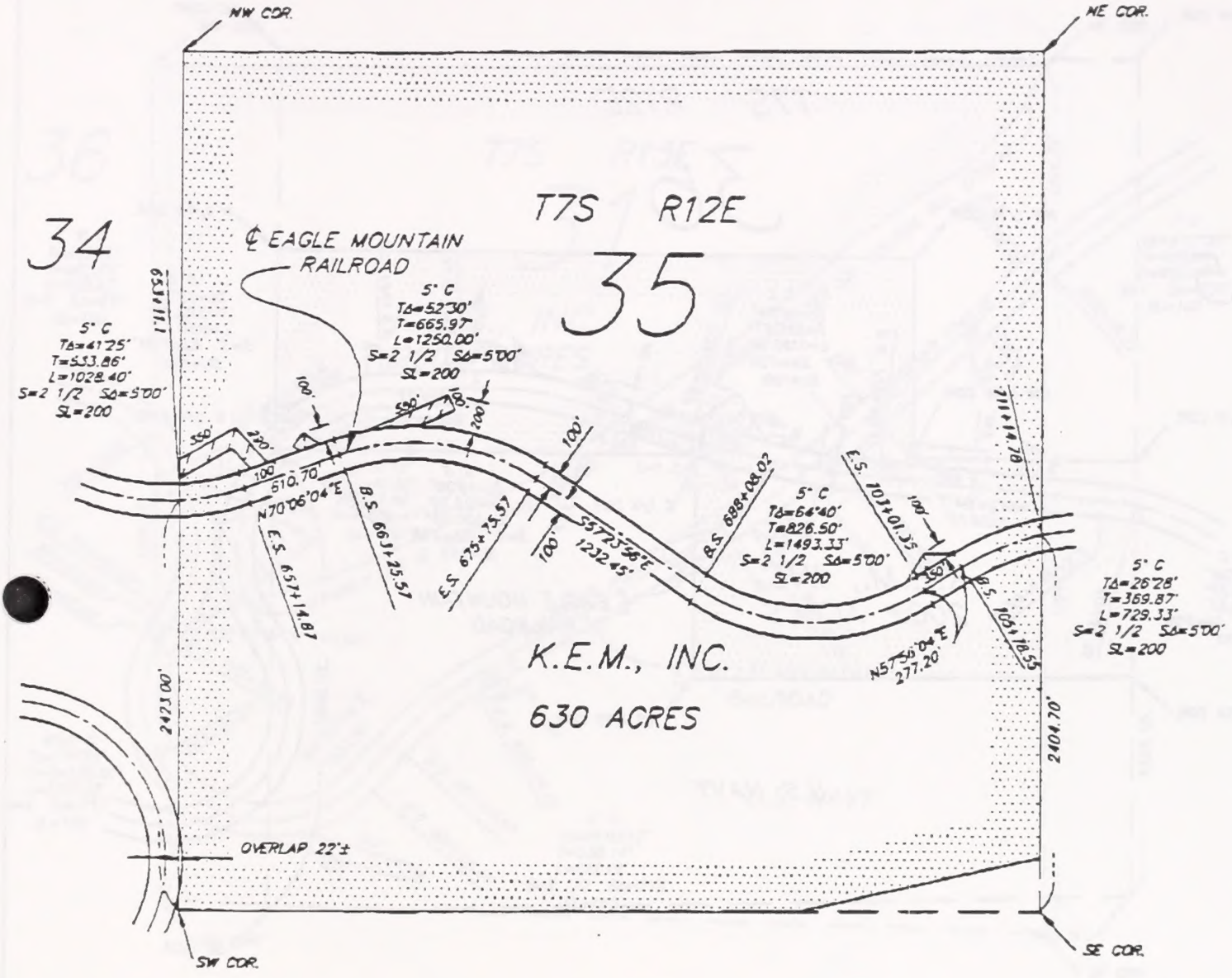
REGISTERED PROFESSIONAL ENGINEER
JOSEPH E. SHAW
No. C-18784
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225 East Airport Drive, San Bernardino, California

01/07/97 TUE 13:58 FAX 909 697 5299 USDI BLM-CDD 060 007

EXHIBIT "B"

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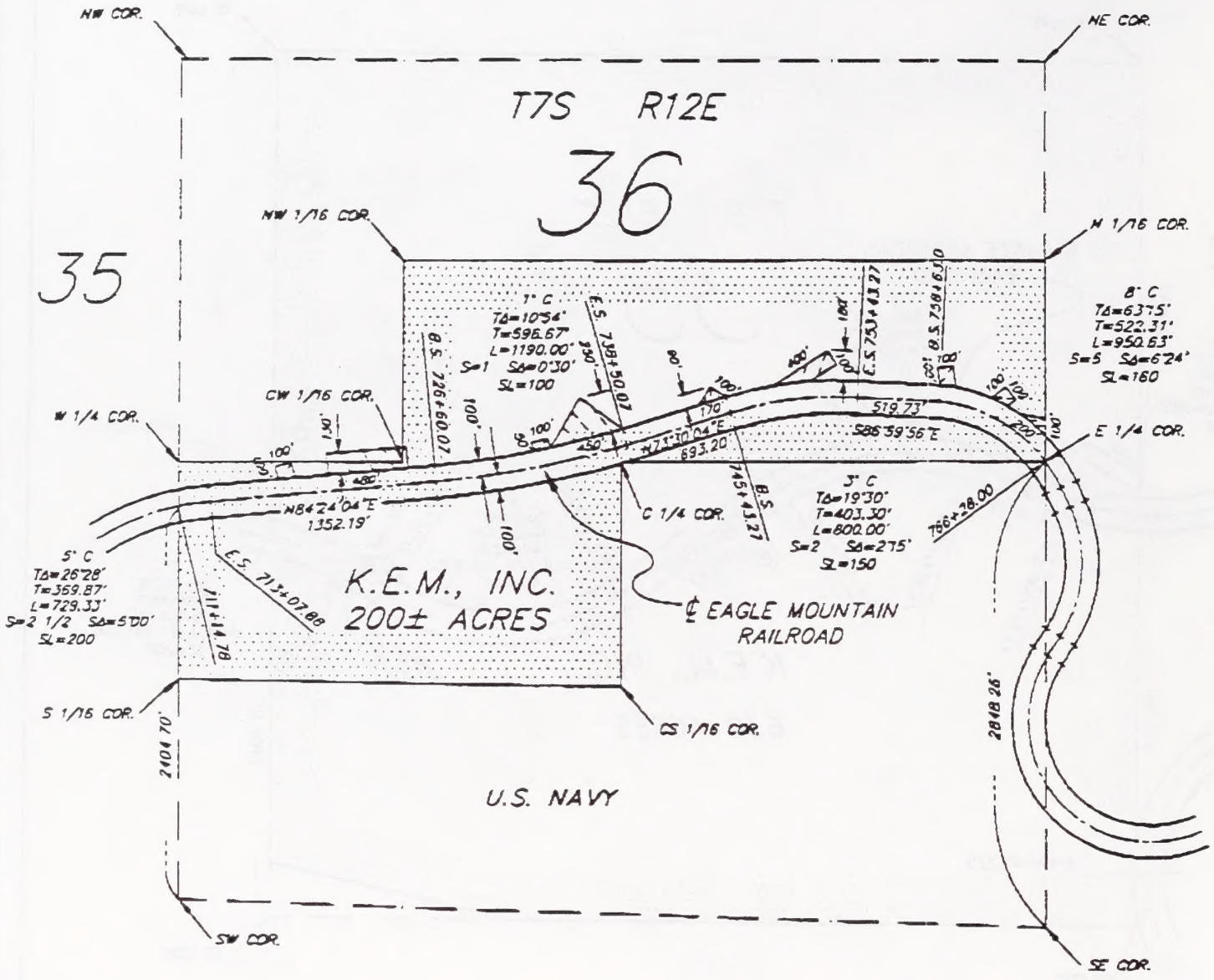
0 500 1000 2000

REGISTERED PROFESSIONAL ENGINEER
E. JOSEPH SHAW
No. C-18784
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STATE OF CALIFORNIA

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220 East Airport Drive, San Bernardino, California

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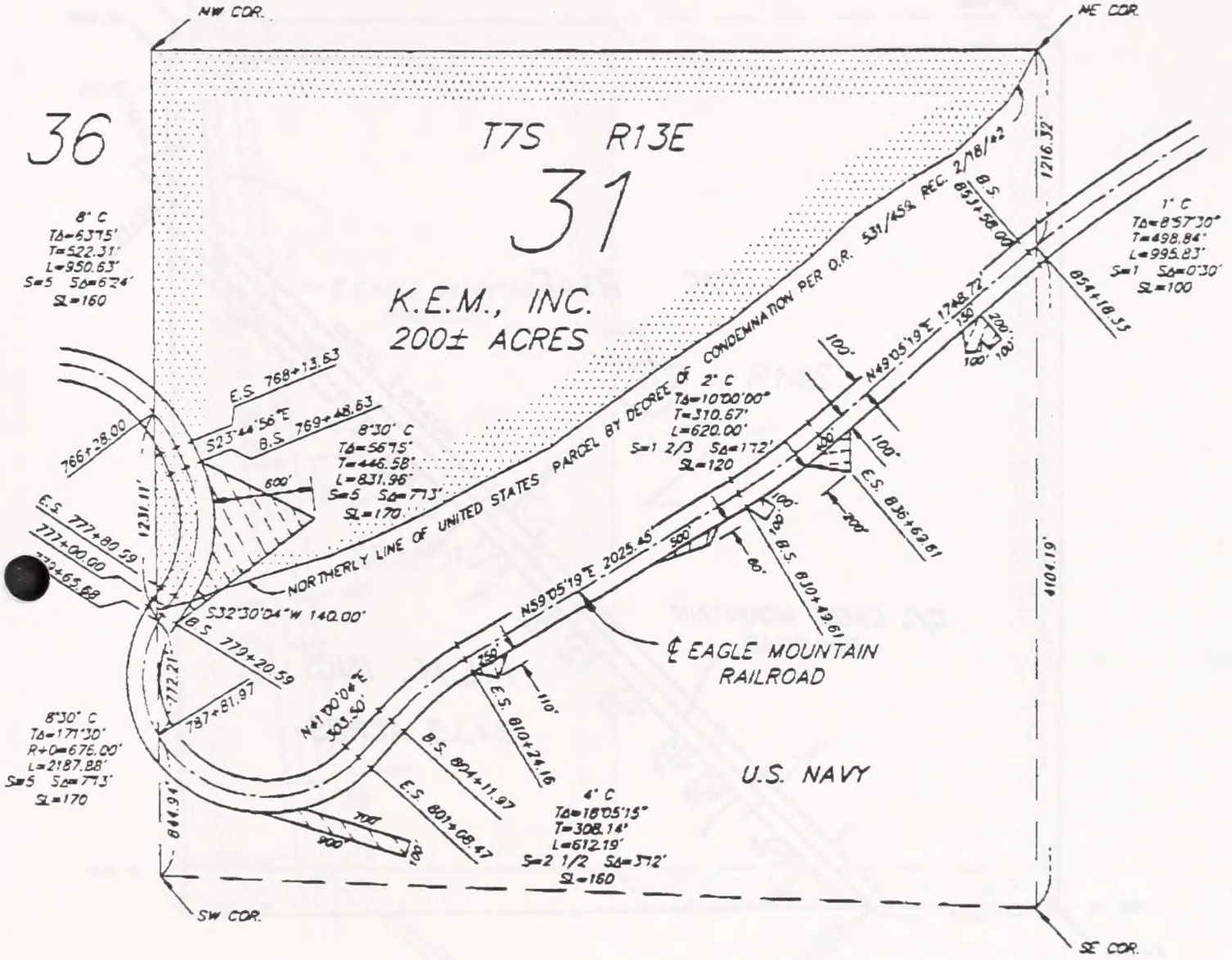
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E. JOSEPH SHAW
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STATE OF CALIFORNIA

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225 East Airport Drive, San Bernardino, California

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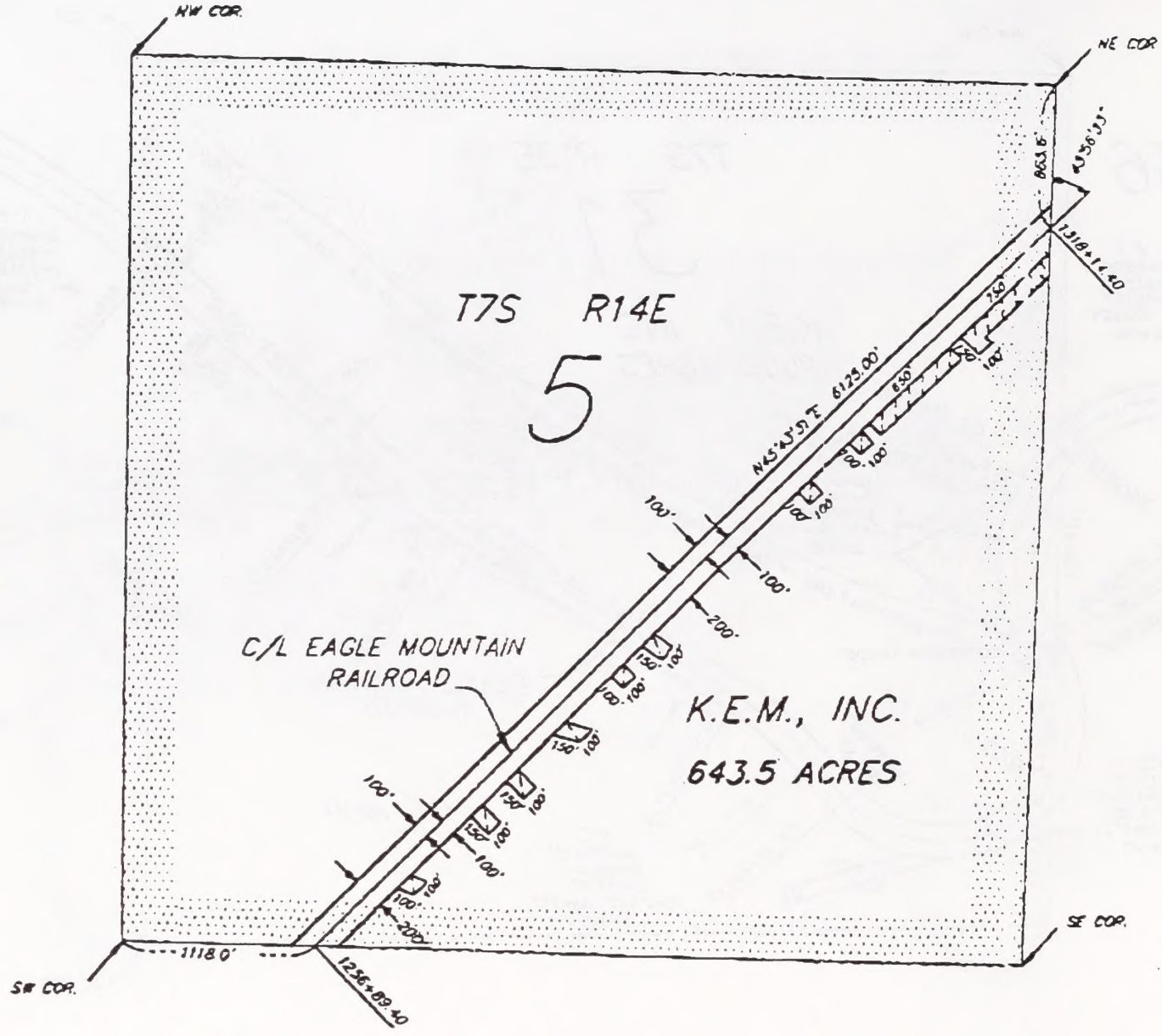
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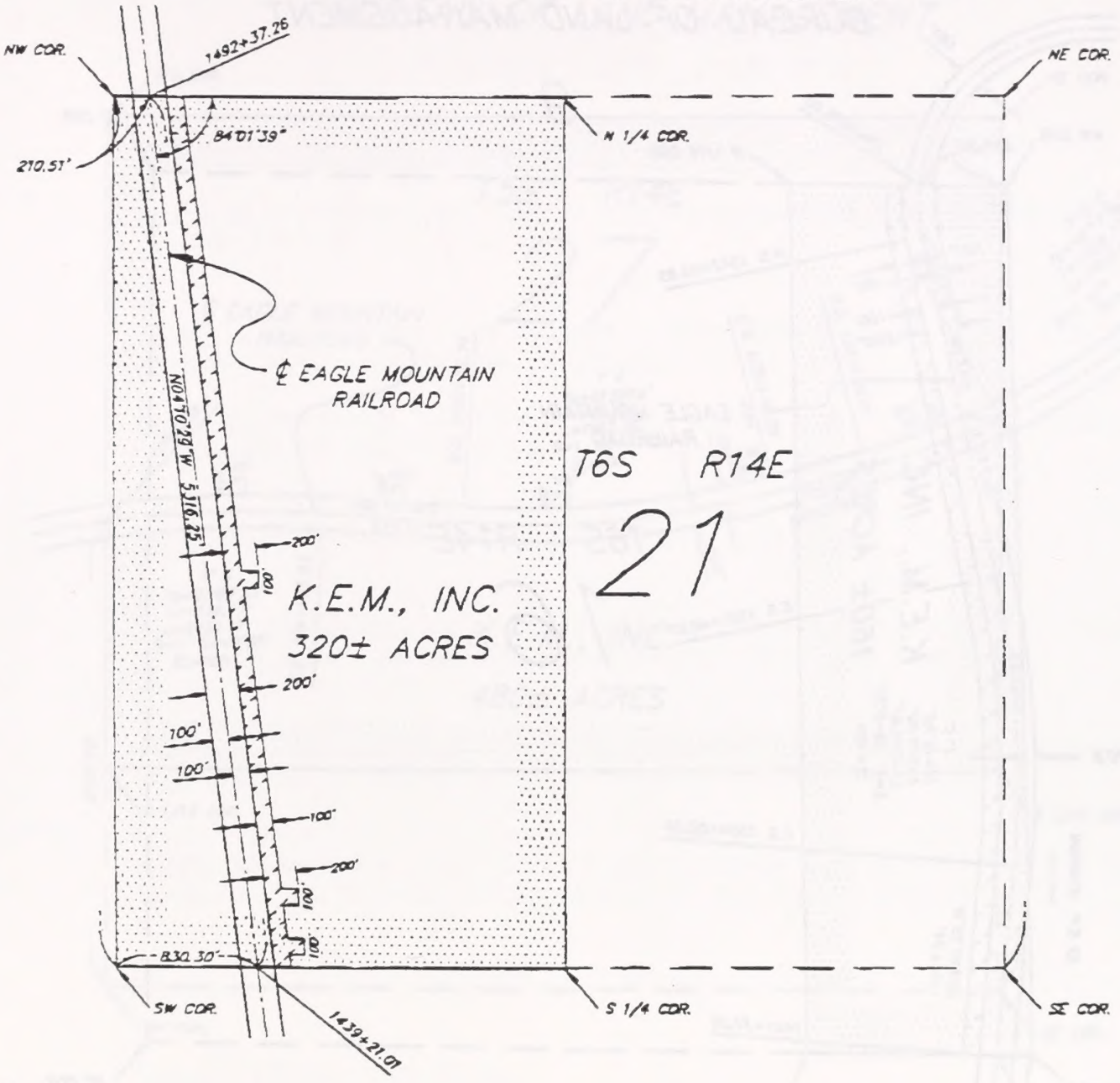
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REGISTERED PROFESSIONAL ENGINEER
E. JOSEPH SHAW
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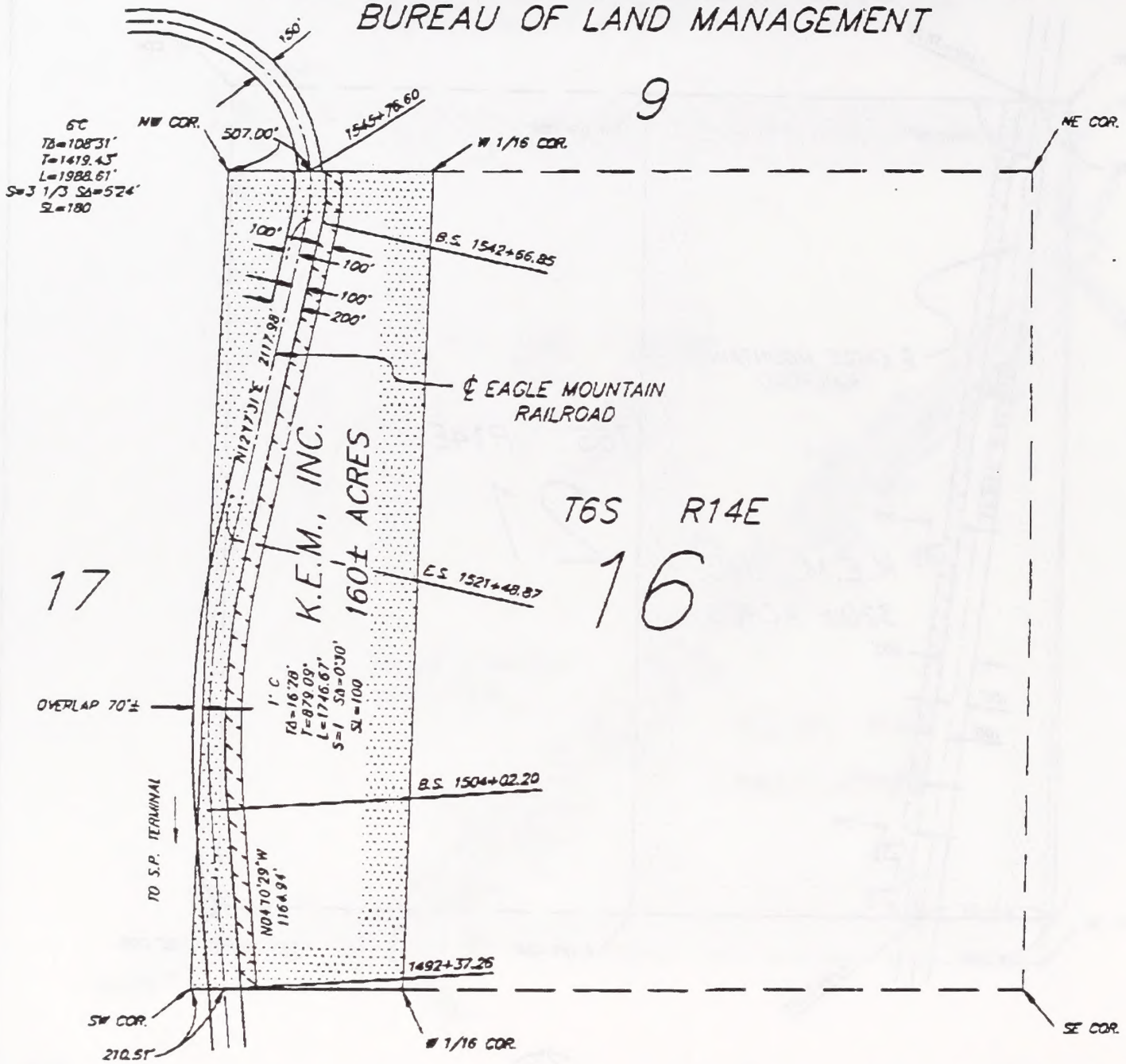
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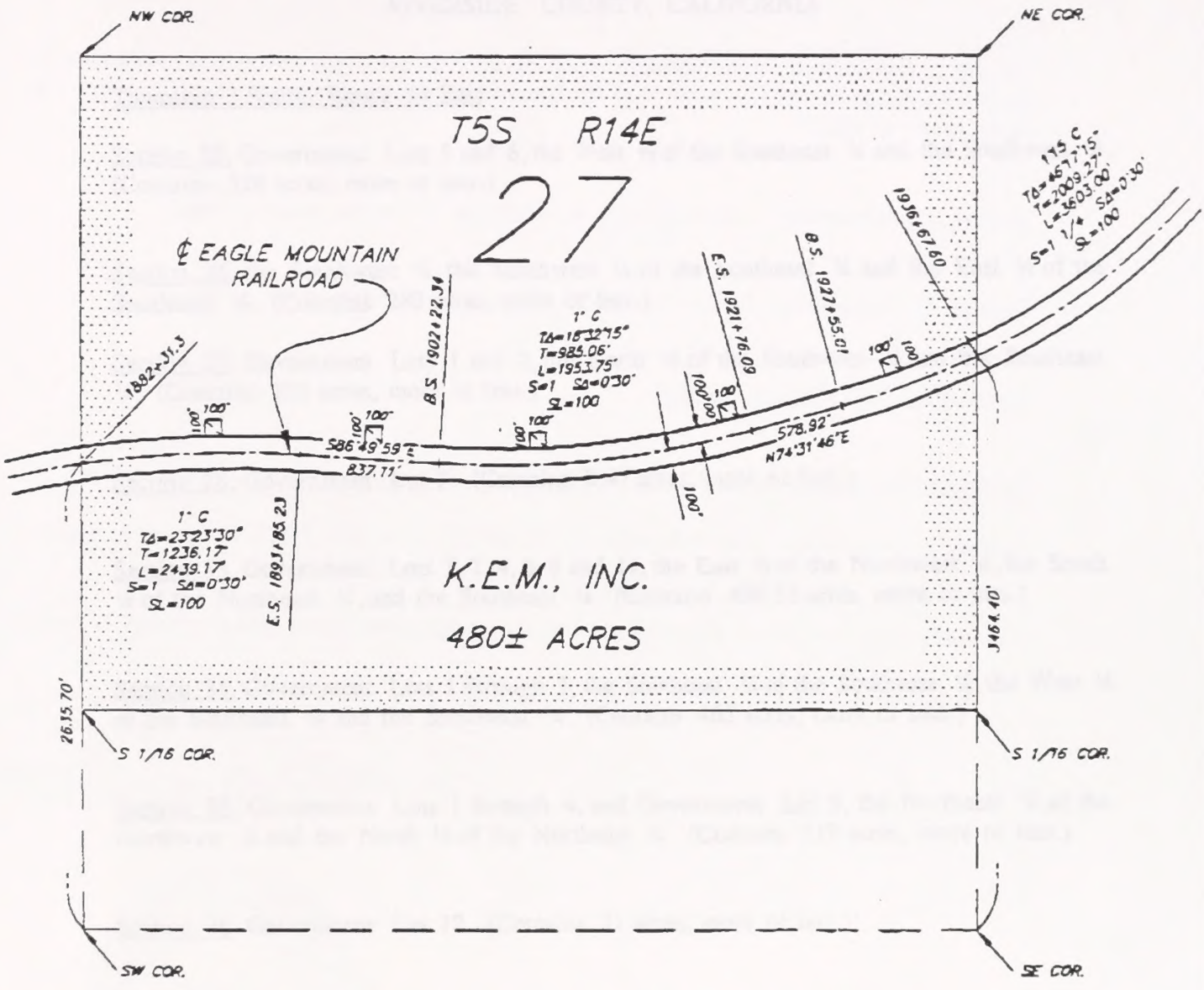
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STATE OF CALIFORNIA

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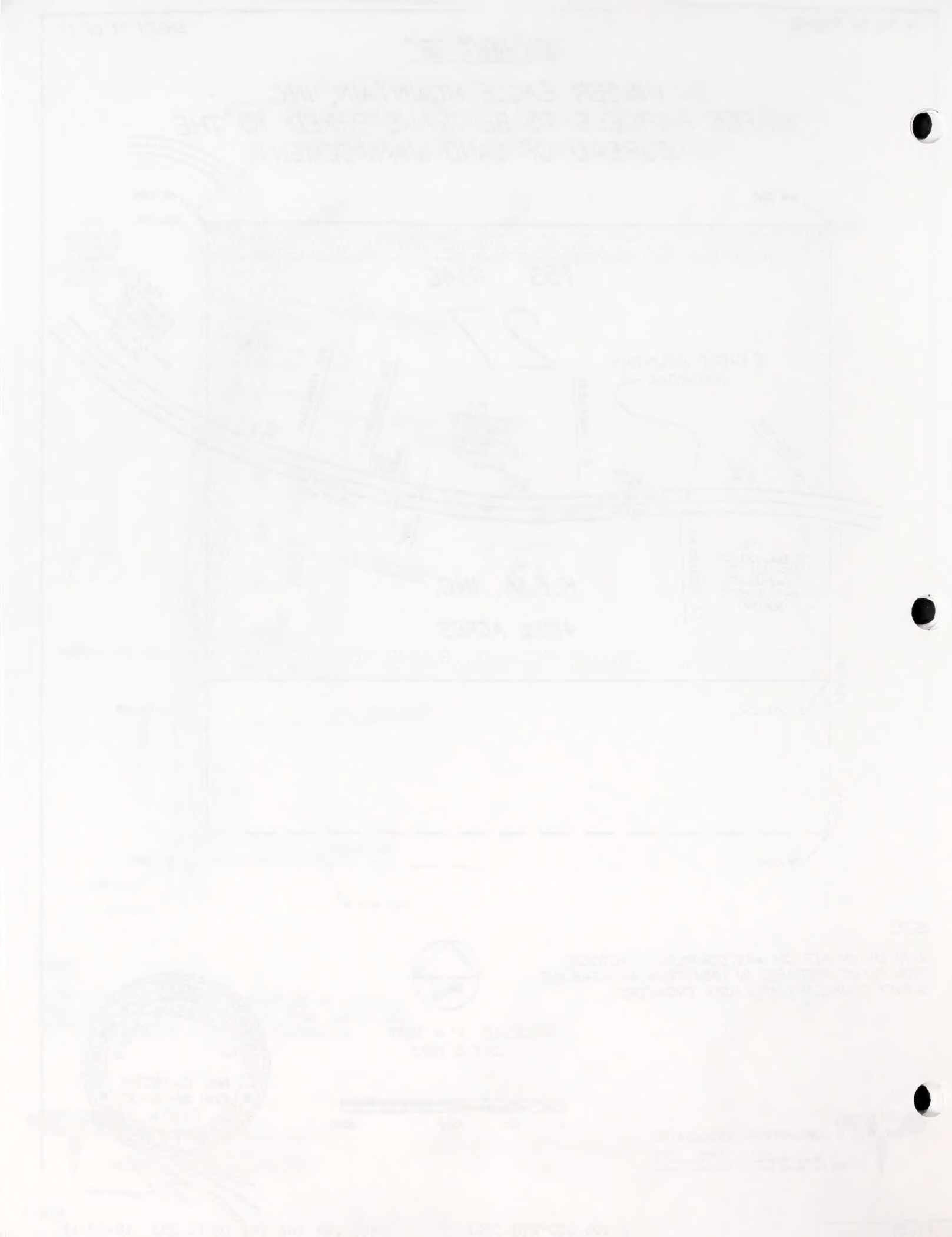
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BUREAU OF LAND MANAGEMENT June 2, 1993
PARCELS TO BE TRANSFERRED TO
KAISER EAGLE MOUNTAIN, INC.

SAN BERNARDINO MERIDIAN
RIVERSIDE COUNTY, CALIFORNIA

Township 3 South, Range 14 East

Section 25, Government Lots 5 and 6, the West ½ of the Southeast ¼ and the Southwest ¼. (Contains 326 acres, more or less.)

Section 26, the Southwest ¼, the Southwest ¼ of the Southeast ¼ and the East ½ of the Southeast ¼. (Contains 280 acres, more or less.)

Section 27, Government Lots 1 and 2, the North ½ of the Southwest ¼ and the Southeast ¼. (Contains 293 acres, more or less.)

Section 28, Government Lot 9. (Contains 2.47 acres, more or less.)

Section 33, Government Lots 1, 2, 4, 6, 8 and 11, the East ½ of the Northwest ¼, the South ½ of the Northeast ¼, and the Southeast ¼. (Contains 490.55 acres, more or less.)

Section 34, Government Lots 1 through 7, the Southeast ¼ of the Southeast ¼, the West ½ of the Southeast ¼ and the Southwest ¼. (Contains 465 acres, more or less.)

Section 35, Government Lots 1 through 4, and Government Lot 9, the Northeast ¼ of the Northwest ¼ and the North ½ of the Northeast ¼. (Contains 219 acres, more or less.)

Section 36, Government Lot 12. (Contains 21 acres, more or less.)

Township 3 South, Range 15 East

Section 31, Government Lots 5, 10 through 14, and 17 through 19. (Contains 296 acres, more or less.)

002 USDI BLM-CDD 060 01/07/97 TUE 13:47 FAX 909 697 5299

Township 4 South, Range 14 East

Section 1, Government Lots 8 through 11, the Southwest ¼ of the Southeast ¼, the East ½ of the Southeast ¼ of the Southwest ¼ and the East ½ of the Northwest ¼ of the Southeast ¼. (Contains 149 acres, more or less.)

Section 2, Government Lots 7 through 9, the South ½ of the Southwest ¼, the Southwest ¼ of the Southeast ¼ and the West ½ of the Southeast ¼ of the Southeast ¼. (Contains 176 acres, more or less.)

Section 11, Government Lots 1 through 4. (Contains 171 acres, more or less.)

Section 12, Government Lots 1 through 4. (Contains 172 acres, more or less.)

Township 4 South, Range 15 East

Section 6, Government Lots 4, 5, and 8 through 11. (Contains 148 acres, more or less).

Section 7, Government Lots 4 through 10, 12 and 13. (Contains 272 acres, more or less.)

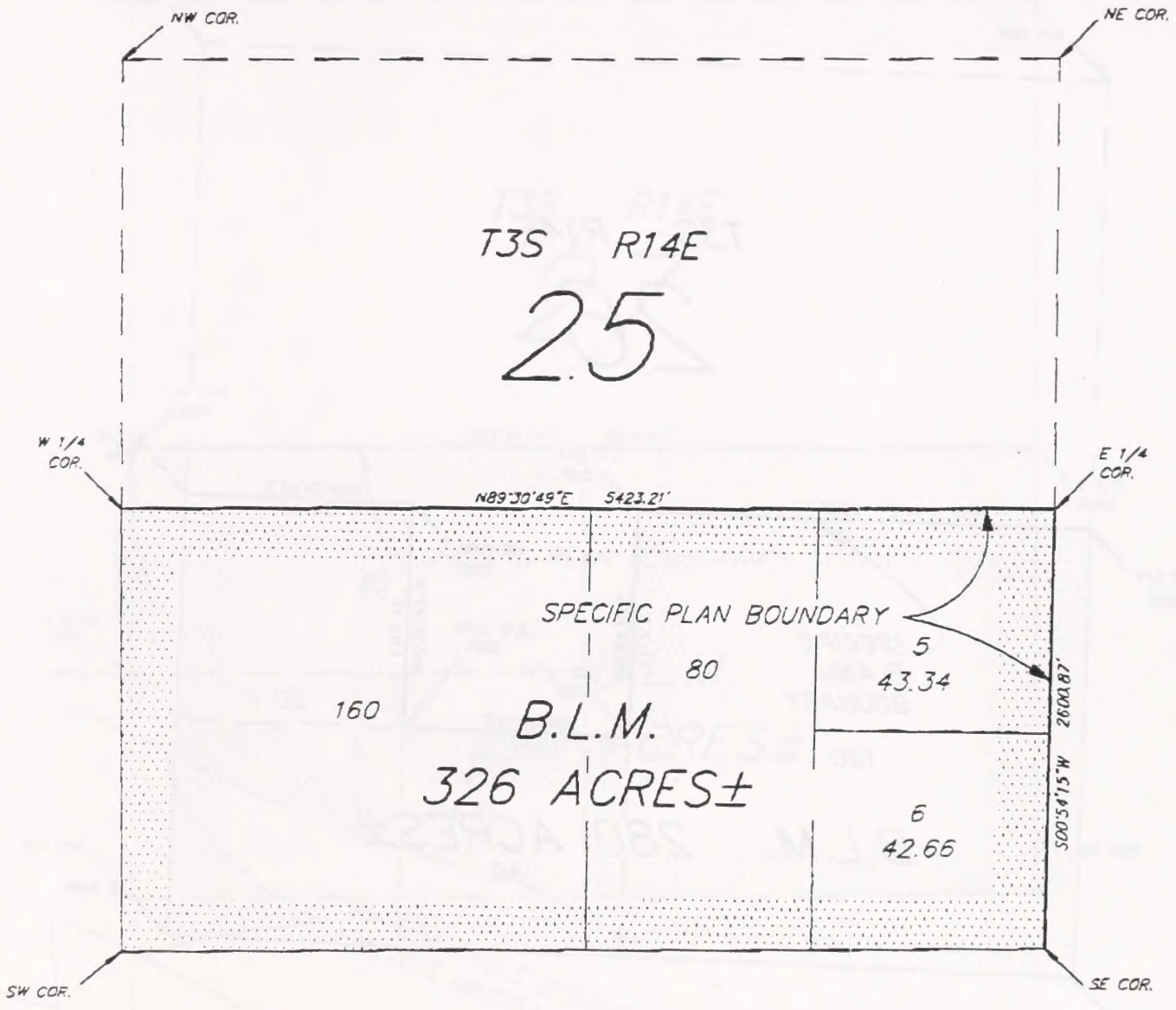
The areas described above for exchange contain an aggregate 3,481.02 acres, more or less.

Harold E. Robinson, PLS 3069

PROFESSIONAL LAND SURVEYOR
HAROLD E. ROBINSON
No. 3069
Exp. 6/30/96
STATE OF CALIFORNIA

EXHIBIT "A"

BUREAU OF LAND MANAGEMENT
PARCELS TO BE TRANSFERRED TO
KAISER EAGLE MOUNTAIN, INC.



NOTE:

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SCALE: 1" = 1000'
JUNE 2, 1993

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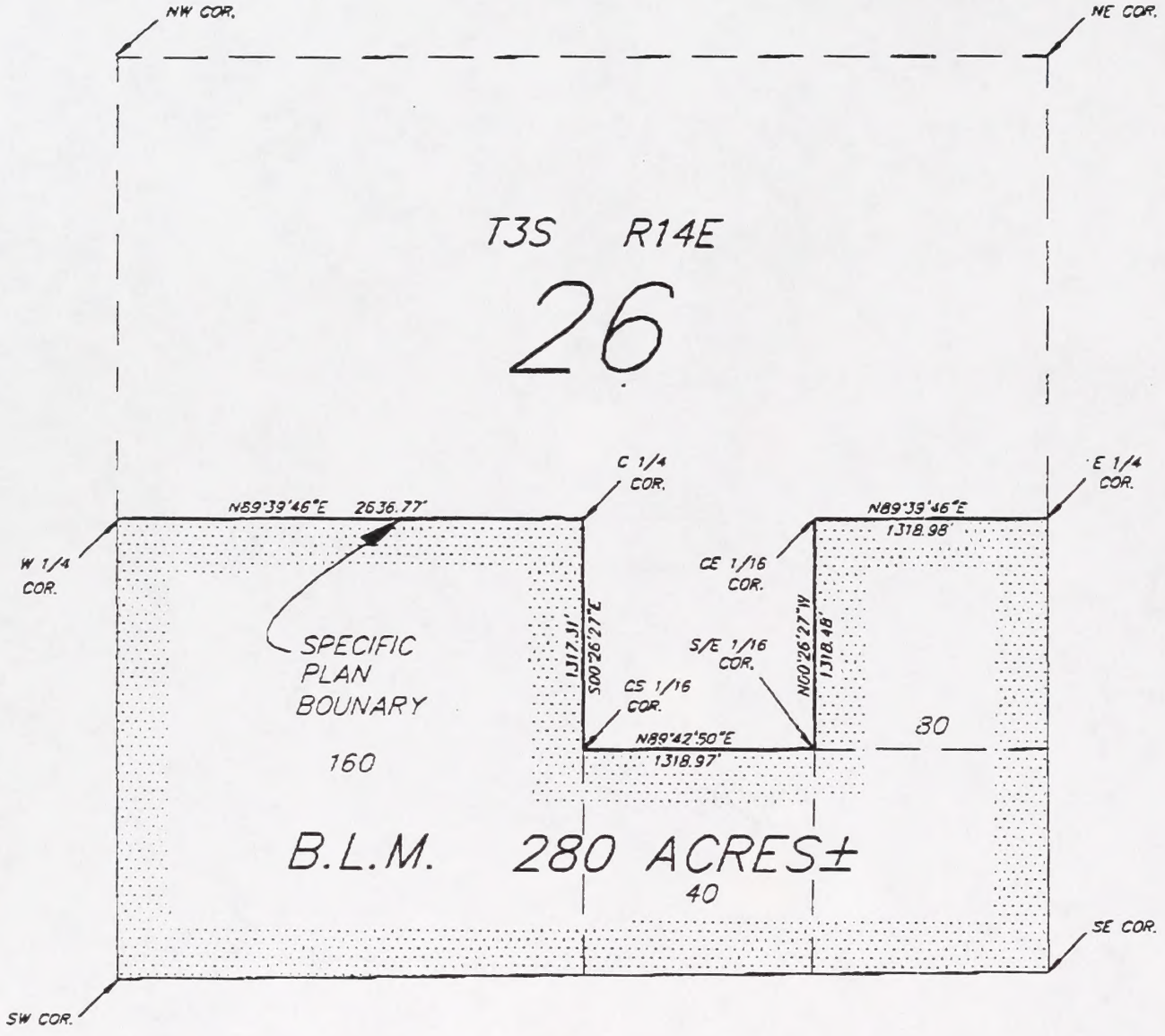
PROFESSIONAL LAND SURVEYOR
HAROLD E. ROBINSON
No. 3069
Exp. 6/30/96
STATE OF CALIFORNIA

ENGINEERING ASSOCIATES
Mail P.O. Box 8087 . 92412
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225 East Airport Drive, San Bernardino, California

Harold E. Robinson

EXHIBIT "A"

BUREAU OF LAND MANAGEMENT
PARCELS TO BE TRANSFERRED TO
KAISER EAGLE MOUNTAIN, INC.



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PROFESSIONAL LAND SURVEYOR
HAROLD E. ROBINSON
No. 3069
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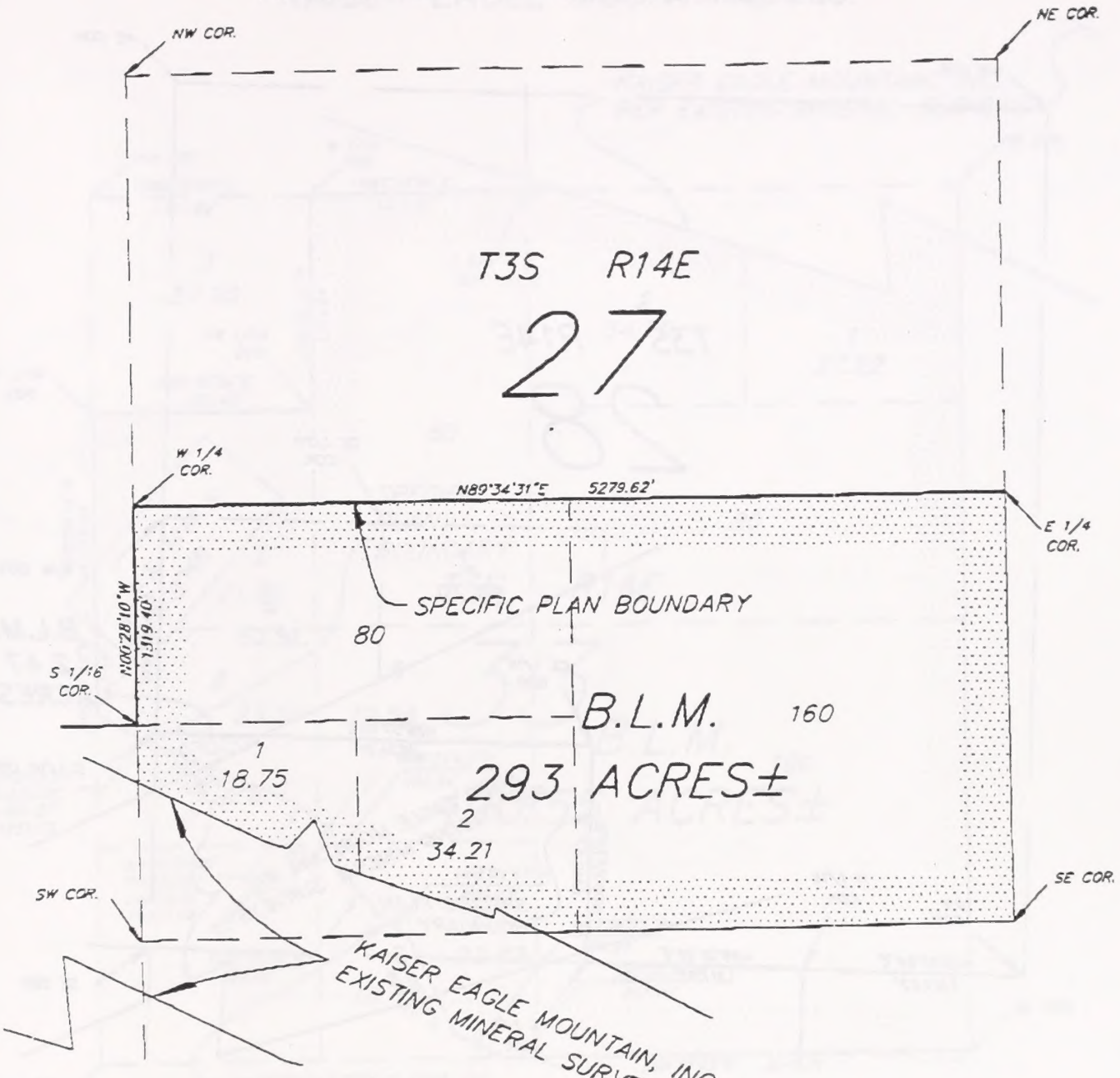
ENGINEERING ASSOCIATES
Mail P.O. Box 8087 - 92412
Phone (714)884-5800 Fax (714)880-6145
225 East Airport Drive, San Bernardino, California

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01/07/97 TUE 13:48 FAX 909 697 5299 USDI BLM-CDD 060 005

EXHIBIT "A"

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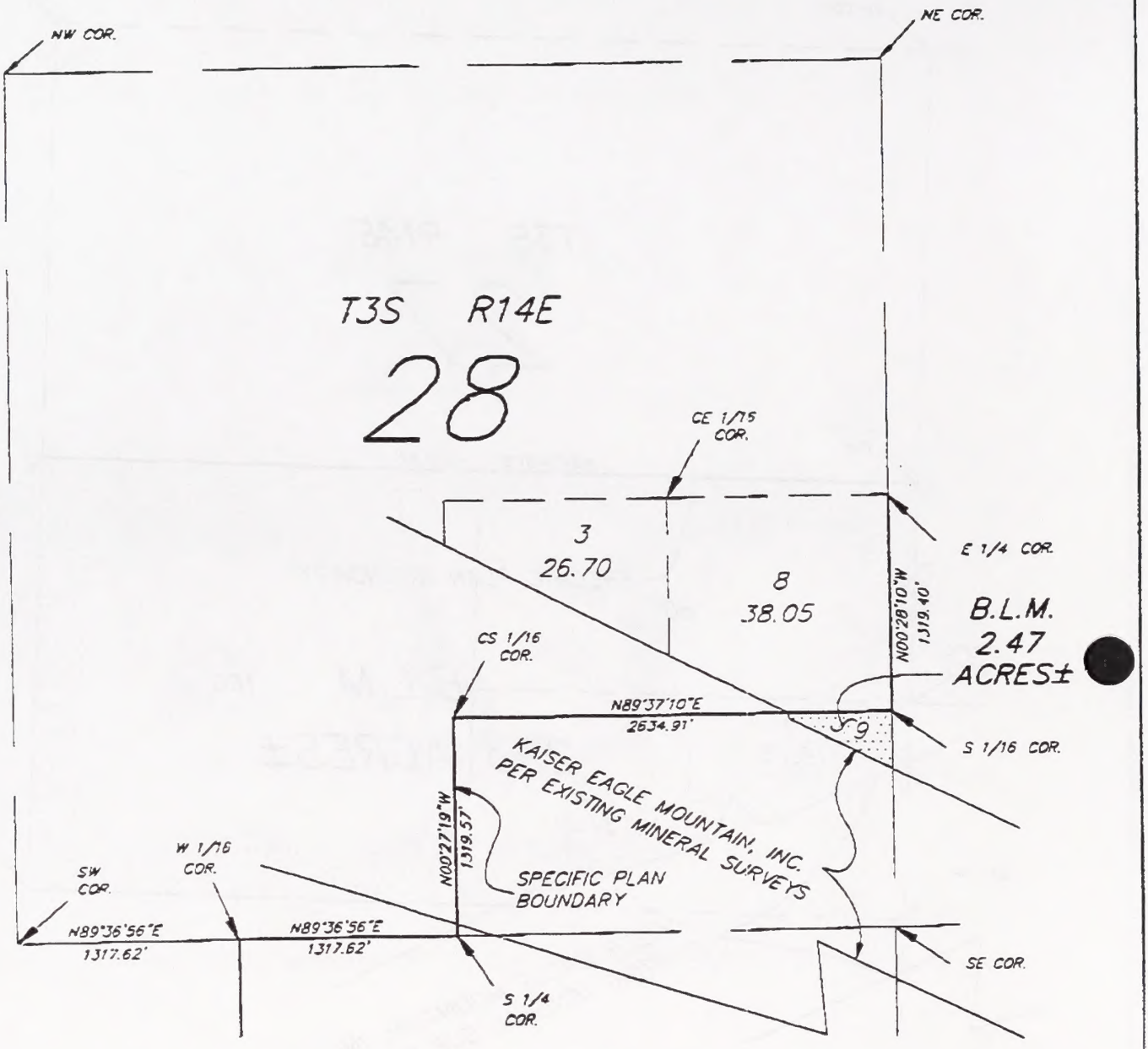
ENGINEERING ASSOCIATES
Mail P.O. Box 8057 - 92412
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225 East Airport Drive, San Bernardino, California

Harold E. Robinson

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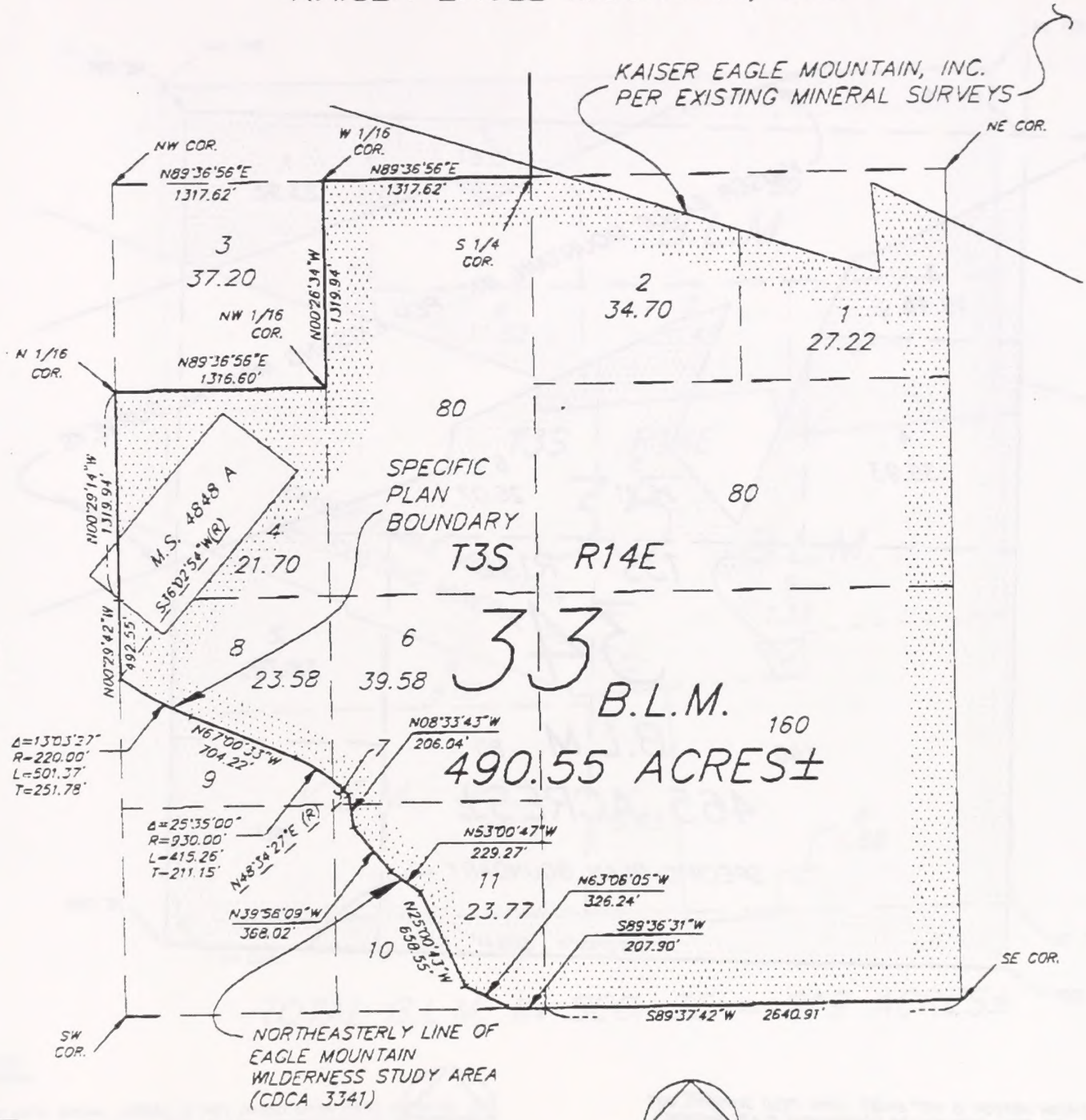
PROFESSIONAL LAND SURVEYOR
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STATE OF CALIFORNIA

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225 East Airport Drive, San Bernardino, California

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EXHIBIT "A"

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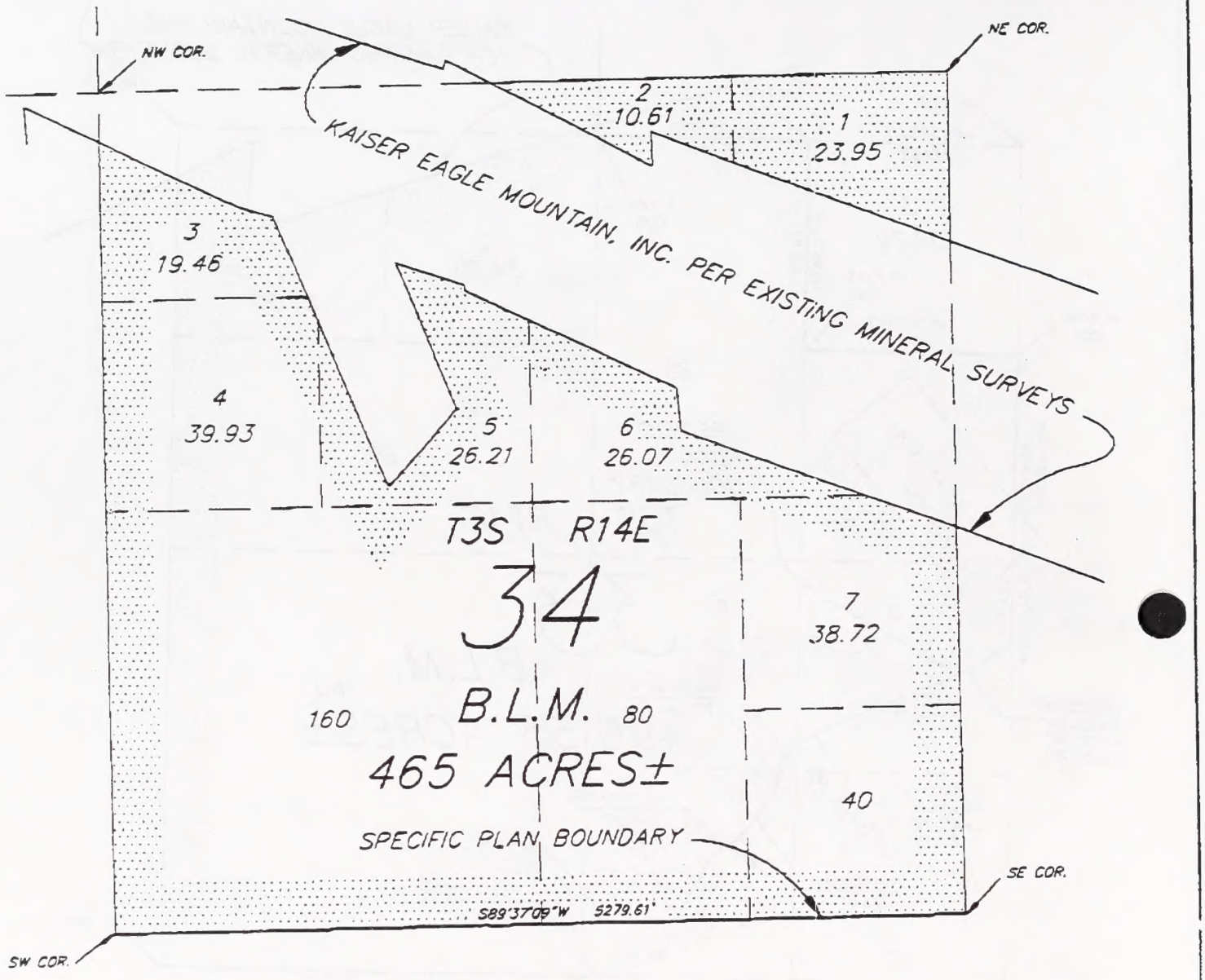
PROFESSIONAL LAND SURVEYOR
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STATE OF CALIFORNIA

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Harold E. Robinson

EXHIBIT A

BUREAU OF LAND MANAGEMENT PARCELS TO BE TRANSFERRED TO KAISER EAGLE MOUNTAIN, INC.



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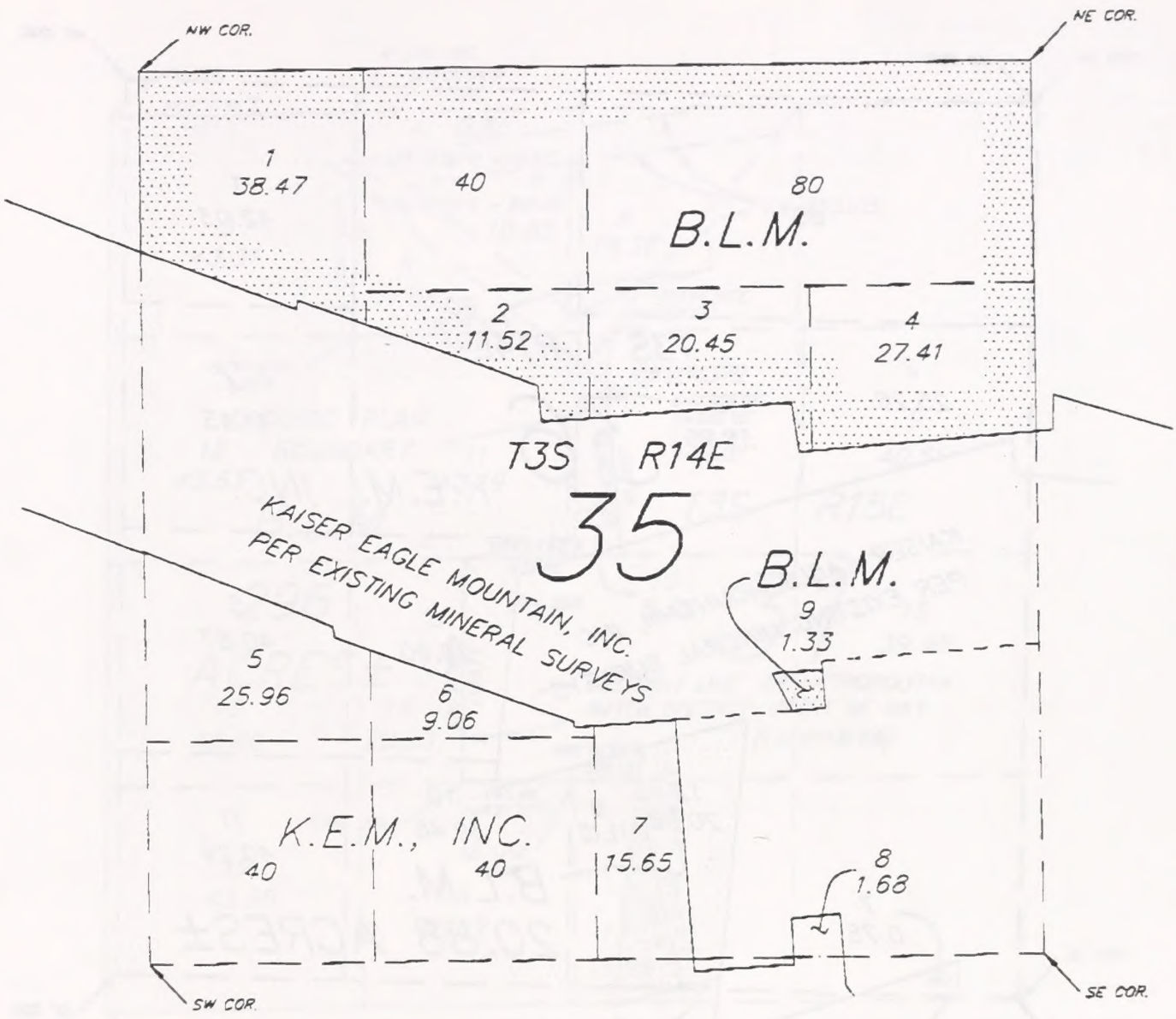
Harold E. Robinson

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01/07/97 TUE 13:50 FAX 909 697 5299 USDI BLM-CDD 060
009

EXHIBIT "A"

BUREAU OF LAND MANAGEMENT PARCELS TO BE TRANSFERRED TO KAISER EAGLE MOUNTAIN, INC.



TOTAL B.L.M. IN SEC. 35 = 219 ACRES±

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N

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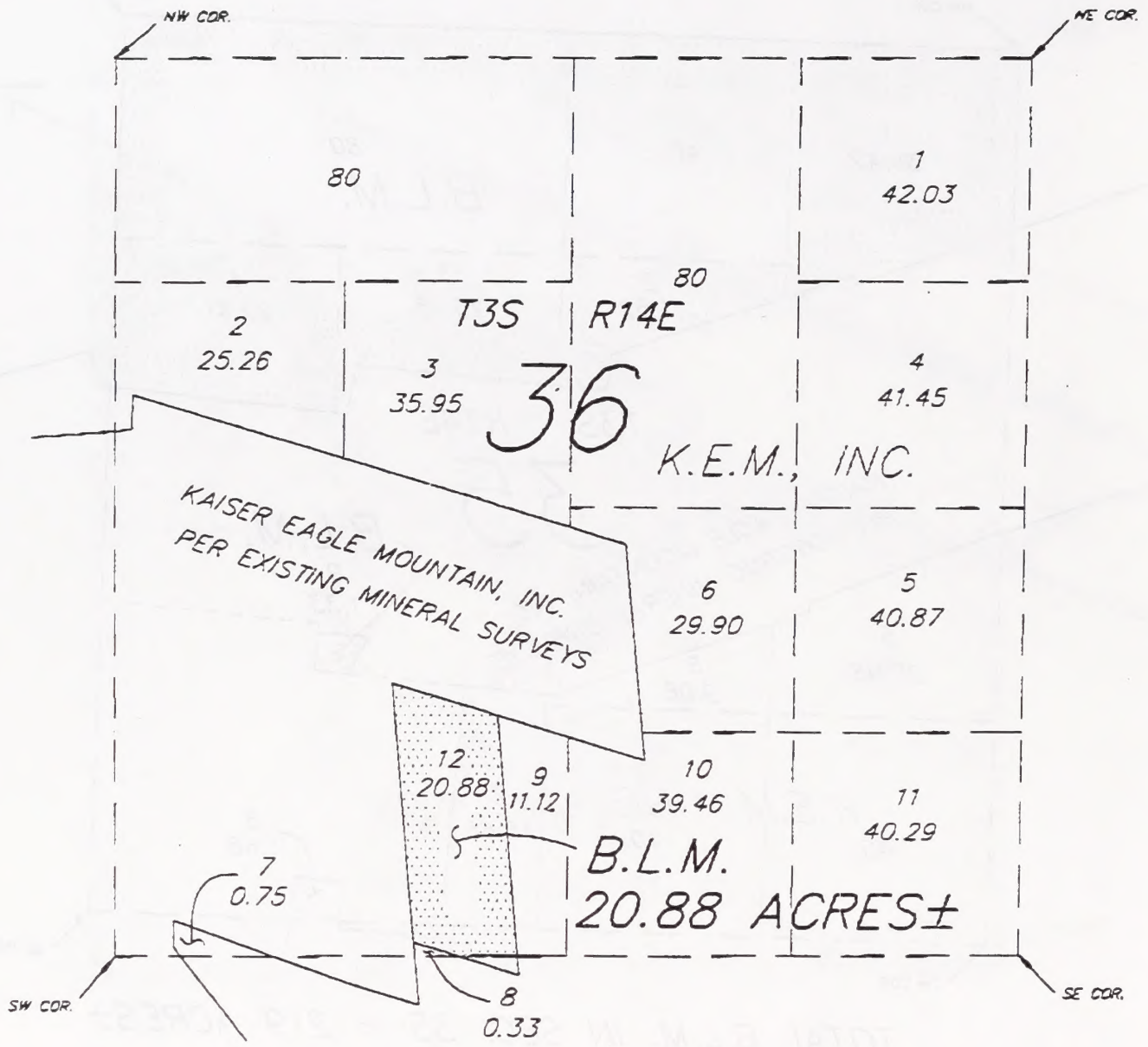
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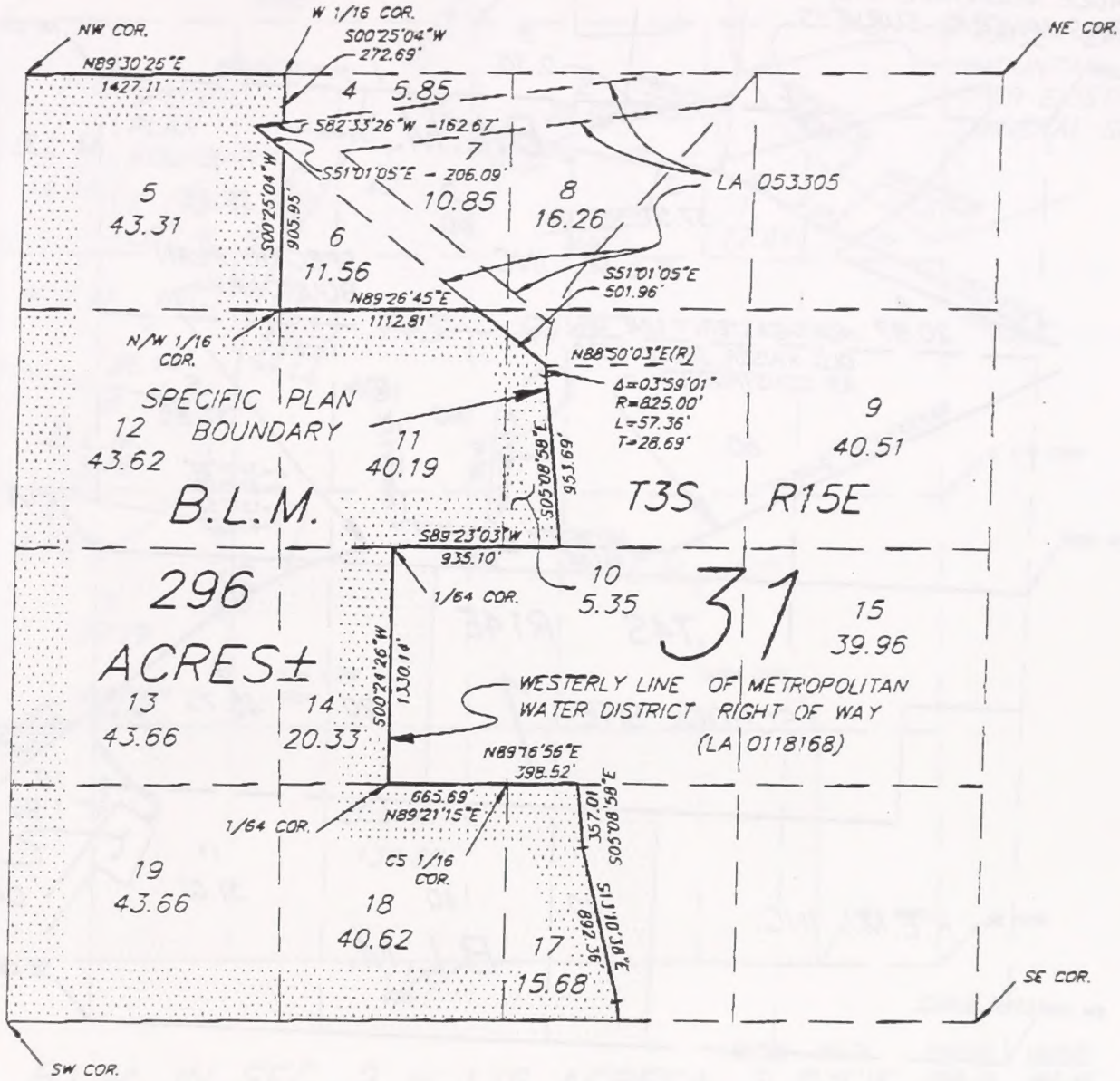
ENGINEERING ASSOCIATES
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225 East Airport Drive, San Bernardino, California

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BUREAU OF LAND MANAGEMENT
PARCELS TO BE TRANSFERRED TO
KAISER EAGLE MOUNTAIN, INC.



NOTE:

THE DATA SHOWN HEREON IS NOT BASED UPON FIELD SURVEYS, BUT WAS CALCULATED FROM PRELIMINARY GOVERNMENT PLATS SHOWING DEPENDENT RESURVEYS AND METES AND BOUNDS SURVEYS IN TOWNSHIP 3 SOUTH, RANGES 14 AND 15 EAST AND TOWNSHIP 4 SOUTH, RANGES 14 AND 15 EAST, SAN BERNARDINO MERIDIAN. THE PLATS NOTED HEREIN ARE SUBJECT TO CHANGE UNTIL APPROVED AND PUBLISHED BY THE DIRECTOR OF THE BUREAU OF LAND MANAGEMENT.

SCALE: 1" = 1000'
JUNE 2, 1993

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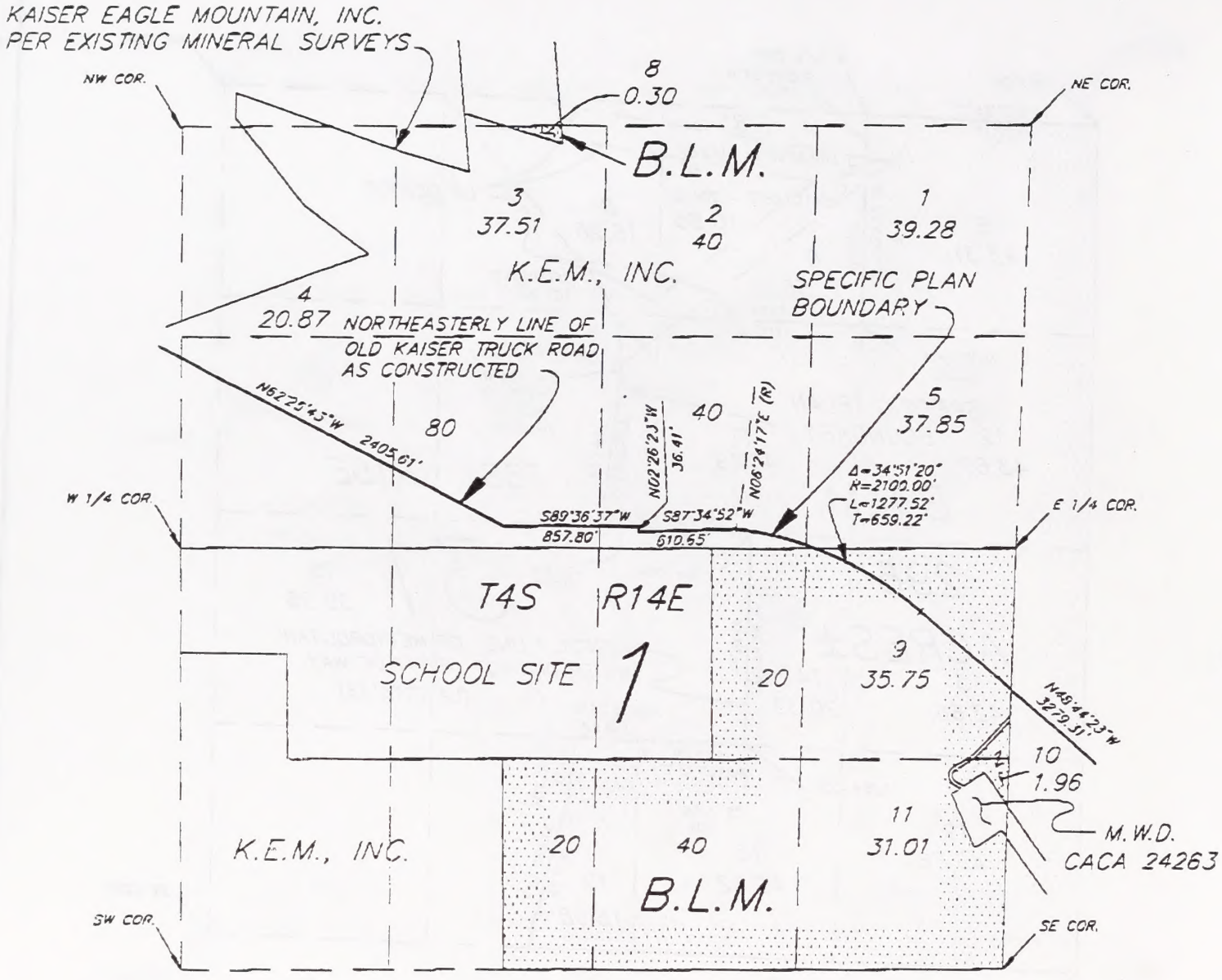
PROFESSIONAL LAND SURVEYOR
HAROLD E. ROBINSON
No. 3069
Exp. 6/30/96
STATE OF CALIFORNIA

ENGINEERING ASSOCIATES
Mail P.O. Box 6057 92412
Phone (714)884-8804 FAX (714)889-8143
223 East Airport Drive, San Bernardino, California

Harold E. Robinson

EXHIBIT "A"

BUREAU OF LAND MANAGEMENT PARCELS TO BE TRANSFERRED TO KAISER EAGLE MOUNTAIN, INC.



TOTAL B.L.M. IN SEC. 1 = 149 ACRES±

NOTE:

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JUNE 2, 1993

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225 East Airport Drive, San Bernardino, California

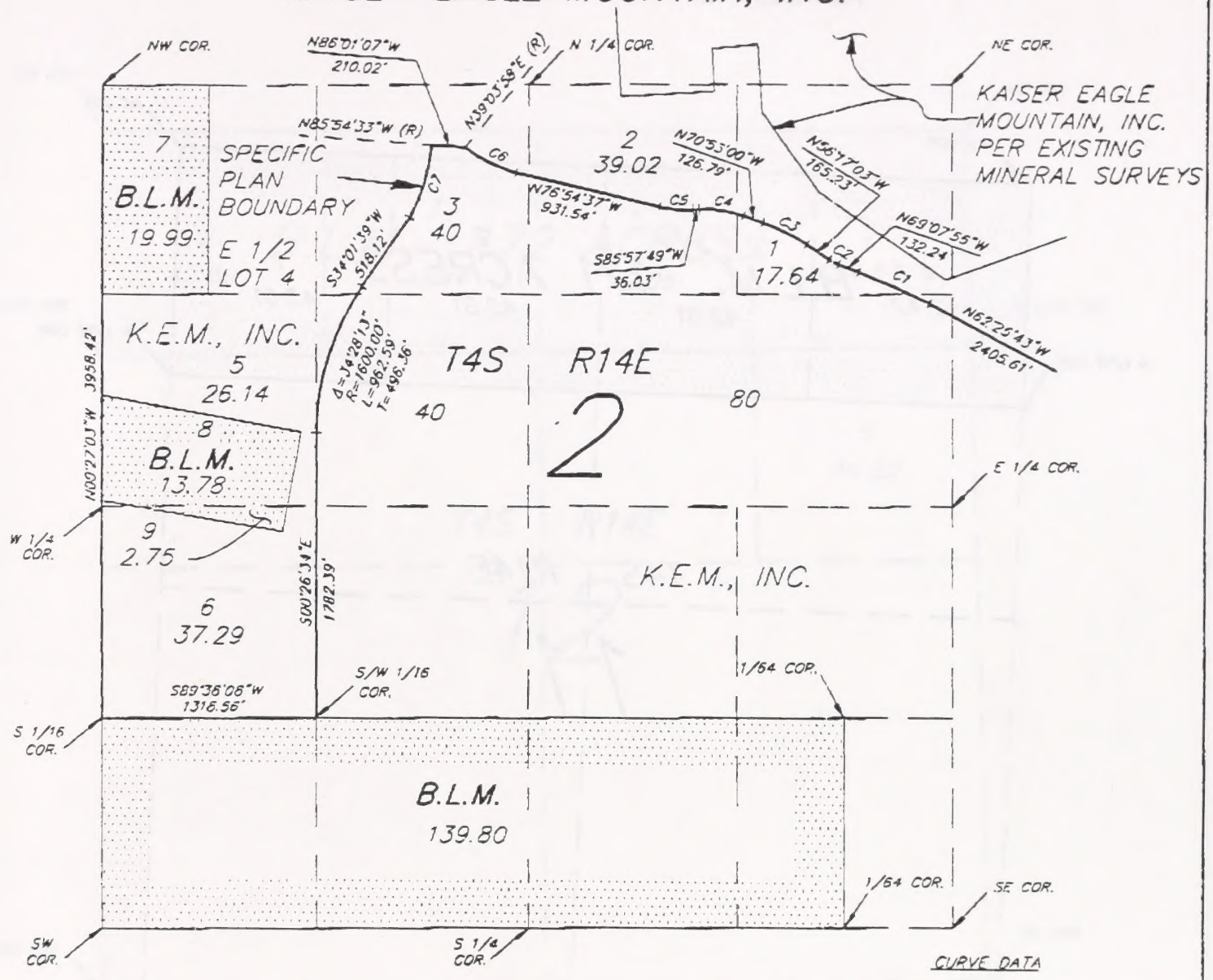
PROFESSIONAL LAND SURVEYOR
HAROLD E. ROBINSON
No. 3069
Exp. 6/30/96
STATE OF CALIFORNIA

Harold E. Robinson

01/07/97 TUE 13:52 FAX 909 697 5299 USDI BLM-CDD 060 013

EXHIBIT "A"

BUREAU OF LAND MANAGEMENT PARCELS TO BE TRANSFERRED TO KAISER EAGLE MOUNTAIN, INC.



CURVE DATA

CURVE	DELTA	RADIUS	LENGTH	TANGENT
C1	06°42'12"	4000.00	467.99'	234.26'
C2	12°50'52"	300.00	67.27'	33.78'
C3	14°35'57"	1200.00'	305.77'	153.72'
C4	23°09'11"	720.00'	290.95'	147.49'
C5	17°08'09"	720.00'	215.34'	108.48'
C6	25°58'35"	800.00'	362.70'	184.52'
C7	23°03'39"	1200.00'	482.98'	244.81'

TOTAL B.L.M. IN SEC. 2 = 176 ACRES±

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SCALE: 1" = 1000'
JUNE 2, 1993

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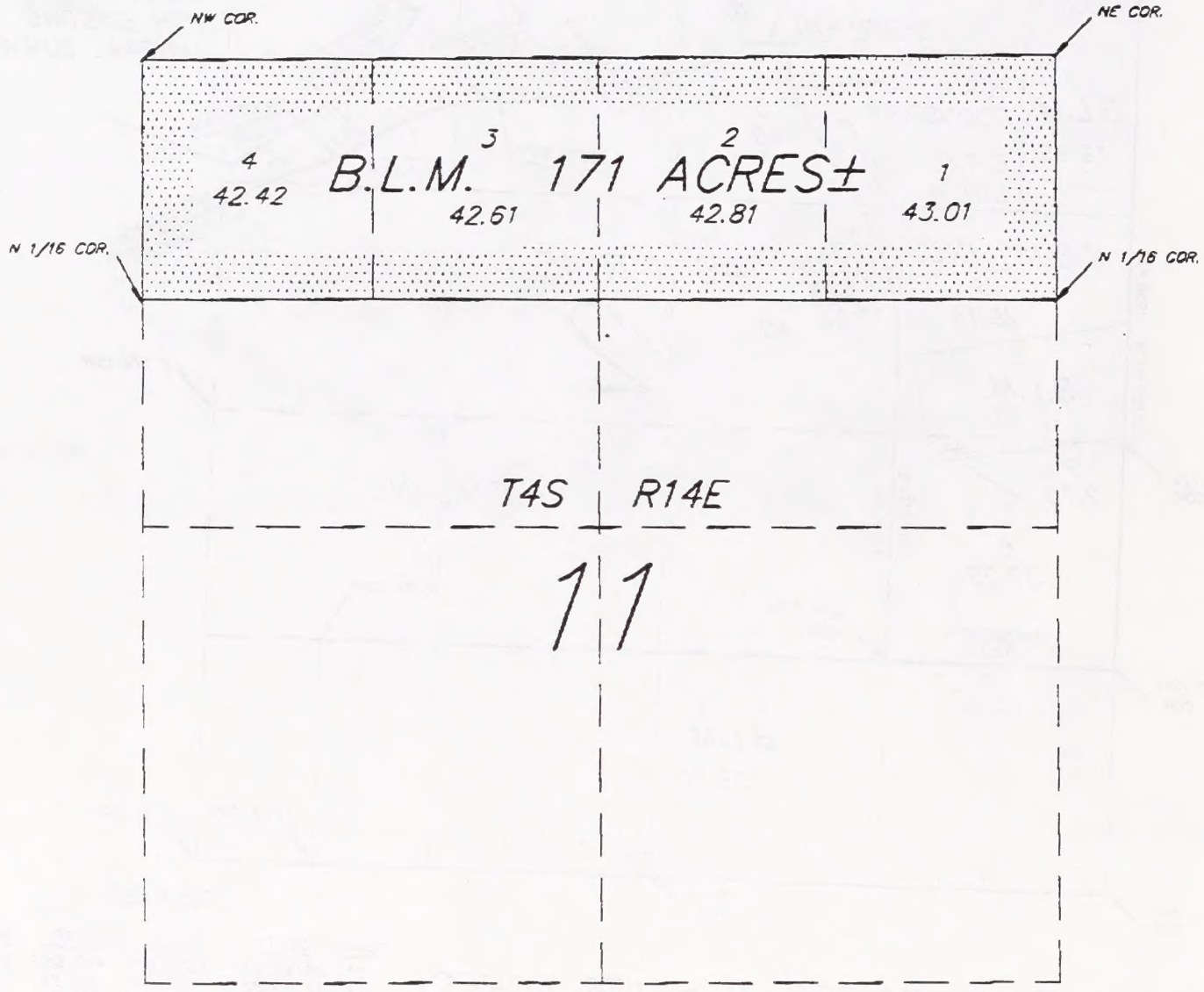
PROFESSIONAL LAND SURVEYOR
HAROLD E. ROBINSON
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STATE OF CALIFORNIA

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225 East Airport Drive, San Bernardino, California

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EXHIBIT "A"

BUREAU OF LAND MANAGEMENT
PARCELS TO BE TRANSFERRED TO
KAISER EAGLE MOUNTAIN, INC.



NOTE:

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SCALE: 1" = 1000'
JUNE 2, 1993

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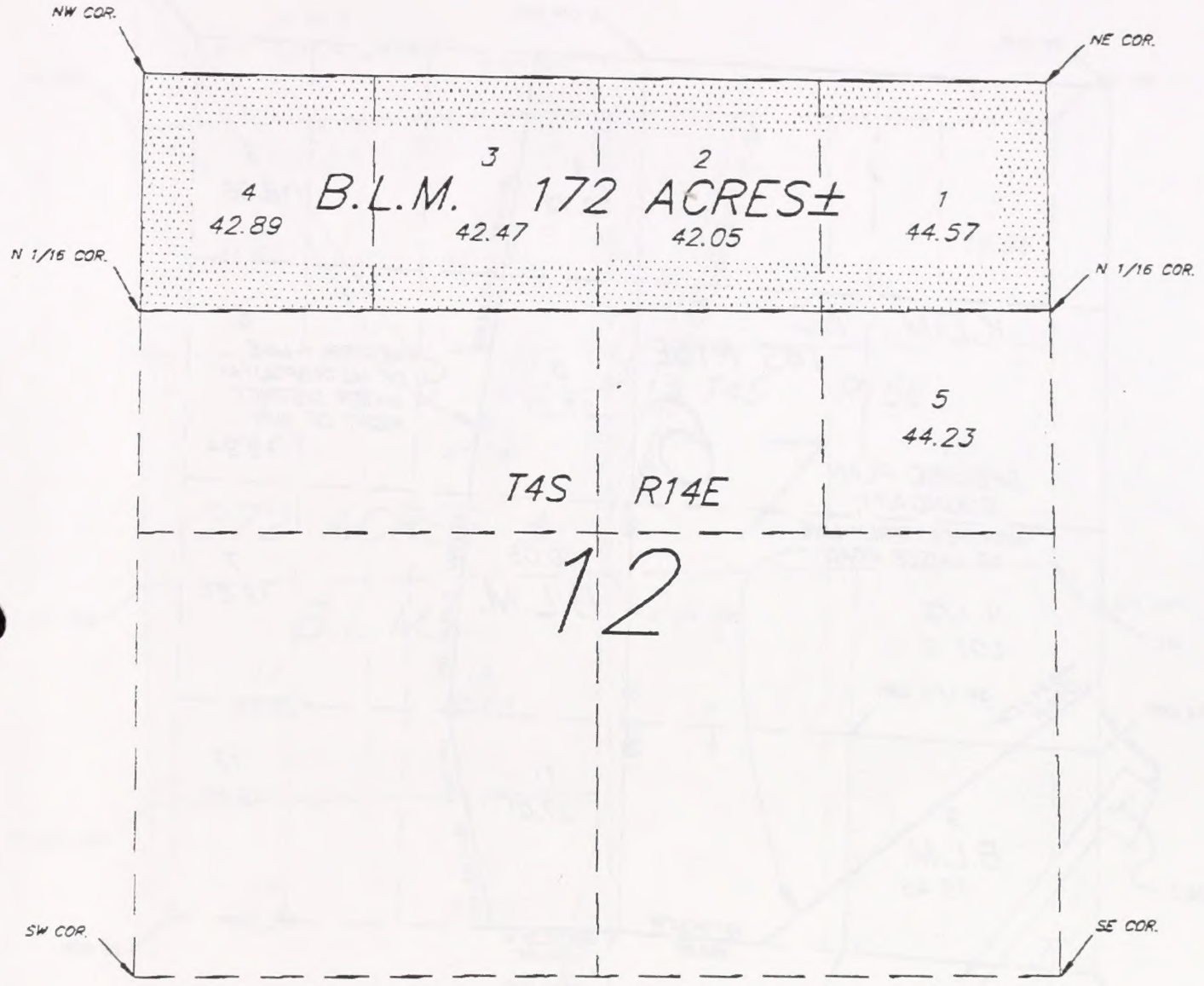
PROFESSIONAL LAND SURVEYOR
HAROLD E. ROBINSON
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STATE OF CALIFORNIA

C.M ENGINEERING ASSOCIATES
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Phone (714)884-8804 FAX (714)889-6143
225 East Airport Drive, San Bernardino, California

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EXHIBIT "A"

BUREAU OF LAND MANAGEMENT
PARCELS TO BE TRANSFERRED TO
KAISER EAGLE MOUNTAIN, INC.



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JUNE 2, 1993

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PROFESSIONAL LAND SURVEYOR
HAROLD E. ROBINSON
No. 3069
Exp. 6/30/96
STATE OF CALIFORNIA

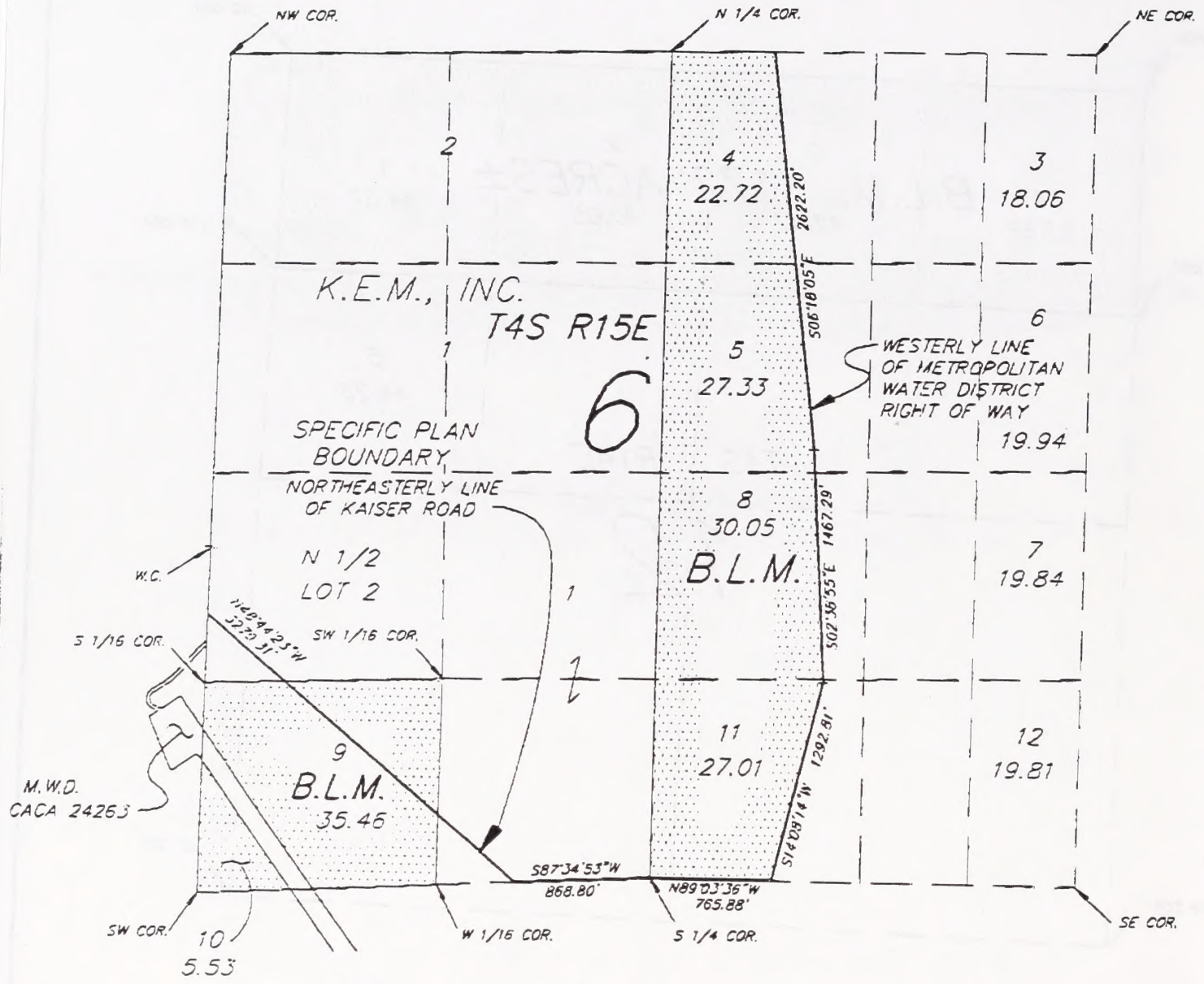
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Phone (714)884-8804 FAX (714)889-6143
225 East Airport Drive, San Bernardino, California

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01/07/97 TUE 13:53 FAX 909 697 5299

EXHIBIT "A"

BUREAU OF LAND MANAGEMENT PARCELS TO BE TRANSFERRED TO KAISER EAGLE MOUNTAIN, INC.



TOTAL B.L.M. IN SEC. 6 = 148 ACRES±

NOTE:

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SCALE: 1" = 1000'
JUNE 2, 1993

0 500 1000 2000

ENGINEERING ASSOCIATES
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Phone (714)884-8804 FAX (714)889-8143
225 East Airport Drive, San Bernardino, California

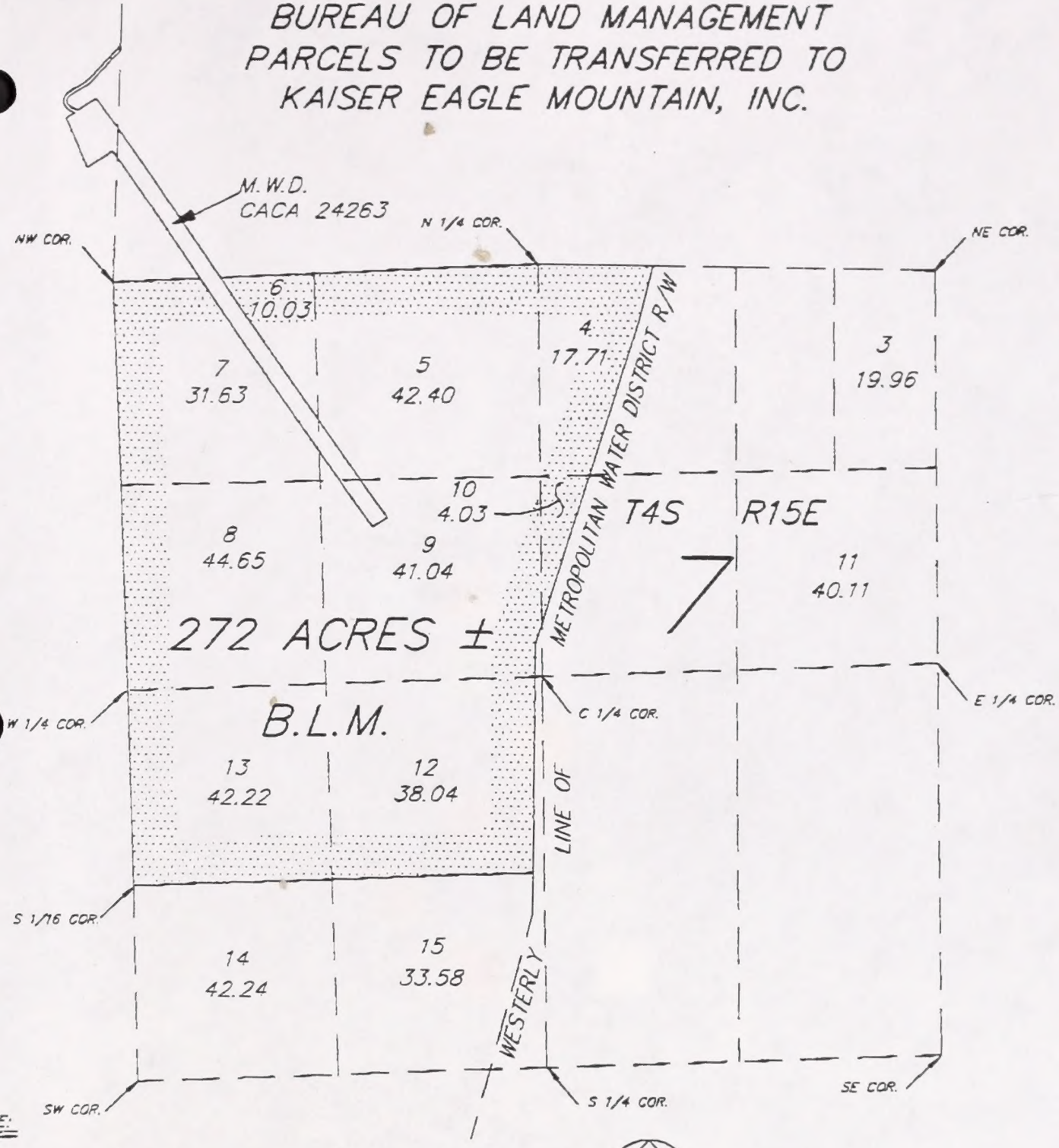
PROFESSIONAL LAND SURVEYOR
HAROLD E. ROBINSON
No. 3069
Exp. 6/30/96
STATE OF CALIFORNIA

Harold E. Robinson

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EXHIBIT "A"

BUREAU OF LAND MANAGEMENT
PARCELS TO BE TRANSFERRED TO
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225 East Airport Drive, San Bernardino, California

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Campsite/Millsite
(PL 790)

San Bernardino Meridian
Riverside County, California

T. 3 S., R. 14 E.

Sec. 35:	Lots 5-8, S½SW¼
Sec. 36:	Lot 7

T. 4 S., R. 14 E.

Sec. 1:	Lot 4, SW¼NW¼
Sec. 2:	Lots 1-3, E½ of Lot 4, S½NE¼, SE¼NW¼, N½NE¼SE¼. NE¼NW¼SE¼

Consisting of approximately 460.63 acres.

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